

AIRFIX

magazine

FOR PLASTIC MODELLERS

MARCH 1969

2s 6d

MONTHLY



IN
THIS
ISSUE

War elephants for 'ancient' armies

Skyraider and Wildcat model details

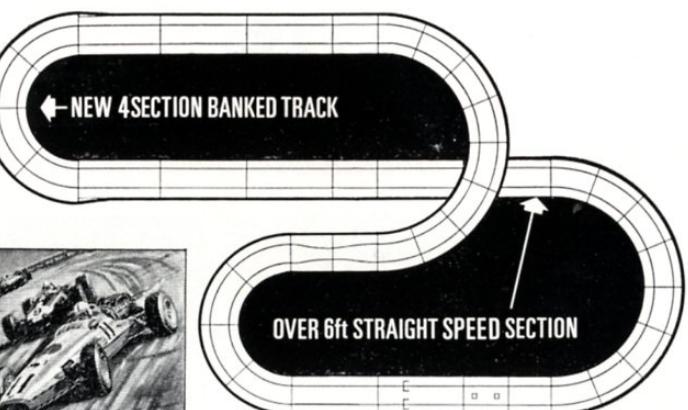
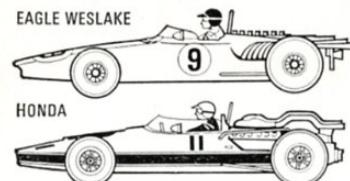
Building a Sherman BARV 'Sea Lion'

STOP PRESS · STOP PRESS · STOP PRESS · STOP PRESS RACE TRACK NEWS FROM AIRFIX M.R.R.C.

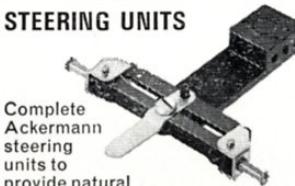
NEW BANKED CIRCUIT
MR 300 SET £13.15.0

WITH TWO NEW GP CARS

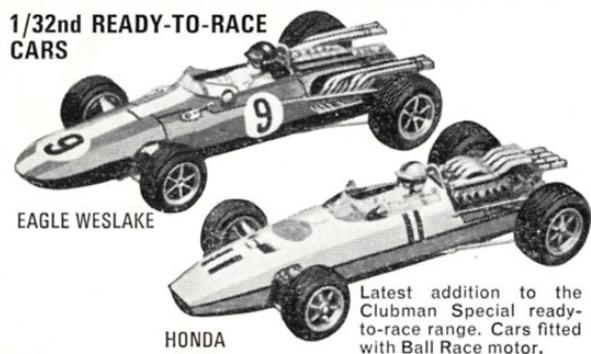
A new MotorAce set from Airfix—the International MR 300—complete with a banked circuit for high performance cornering. Included in the set are two new 1/32nd scale cars—the Honda and Eagle Weslake. Over 31ft. of double track layout. Banked Section available separately 23/-, High Speed Honda and Eagle Weslake at 28/11d.



TYRES
A wide selection of tyres for all models. Latest addition the SP 002 for superb road holding and long life.

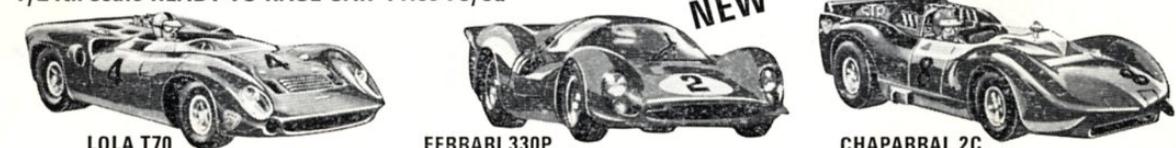


1/32nd READY-TO-RACE CARS



LATEST ADDITION TO THE CLUBMAN SPECIAL READY-TO-RACE RANGE. CARS FITTED WITH BALL RACE MOTOR. PRICE 54/11D.

1/24th scale READY TO RACE CAR Price 70/6d



AIRFIX  **M.R.R.C.**

AIRFIX PRODUCTS LIMITED · HALDANE PLACE · GARRATT LANE · S.W.18

THE COMPLETE RANGE OF
MOTOR RACING ACCESSORIES

See the complete range at your local stockist.

READY TO SERVE!

to satisfy terrific demand Humbrol now sell
AUTHENTIC CAMOUFLAGE COLOURS
either in kits of 6 or **SEPARATELY**

KIT 1
ROYAL AIR FORCE
(EUROPEAN)

- HB.1 Dark Green
- HB.2 Dark Earth
- HB.3 Ocean Grey
- HB.4 Duck Egg Blue
- HB.5 Sky Type S
- HB.6 Sea Grey Medium

KIT 2
LUFTWAFFE

- HG.1 Schwarzgrun 70 (Black Green)
- HG.2 Dunkelgrau 71 (Dark Green)
- HG.3 Hellgrau 76 (Light Grey)
- HG.4 Dunkelgrau 74 (Dark Grey)
- HG.5 Helblau 65 (Light Blue)
- HG.6 R.L.M. Grau 02 (R.L.M. Grey)

KIT 3
U.S.A.F.

- HU.1 Medium Green 42
- HU.2 Olive Drab 41
- HU.3 Neutral Grey 43
- HU.4 Non Specular Sea Blue
- HU.5 Intermediate Blue
- HU.6 Light Grey

KIT 4
FLEET AIR ARM

- HB.7 Extra Dark Sea Grey
- HB.8 Dark Slate Grey
- HB.9 Sea Blue Gloss
- HB.10 Night Black
- HB.11 Underside White

KIT 5
ROYAL AIR FORCE
(OVERSEAS)

- HB.2 Dark Earth
- HB.12 Mid Stone
- HB.13 Azure Blue
- HB.10 Night Black
- HB.11 Underside White
- HB.14 Airframe Silver

KIT 6
FRENCH AIR FORCE

- HF.1 Kaki (Khaki)
- HF.2 Vert (Green)
- HF.3 Terre Foncee (Dark Earth)
- HF.4 Gris Bleu Clair (Lt Blue Grey)
- HF.5 Gris Bleu Fonce (Dk Blue Grey)
- HF.6 Chocolat (Chocolate)

KIT 7
ITALIAN AIR FORCE

- HI.1 Mottle Green
- HI.2 Upper Green
- HI.3 Overall Green
- HI.4 Sand
- HI.5 Grey
- HI.6 Insignia White

KIT 8
JAPANESE AIR FORCE

- HJ.1 Green N.1
- HJ.2 Grey A/N2
- HJ.3 Green A.3
- HJ.4 Mauve N.9
- HJ.5 Brown N.17
- HJ.6 Silver A.6

KIT 9
U.S.A.F. (VIETNAM)

- HU.7 Green 34079
- HU.8 Green 34102
- HU.9 Tan 30219
- HU.10 Grey 36622
- HU.11 Airframe White
- HU.12 Night Black

KIT 10
MILITARY VEHICLES

- HM.1 8th Army Desert Yellow
- HM.2 Afrika Korps Desert Yellow
- HM.3 U.S. Olive Drab
- HM.4 German Panzer Grey
- HB.1 Dark Green
- HB.2 Dark Earth

KIT 11
NAVAL VESSELS

- HN.1 Light Grey
- HN.2 Dark Grey
- HN.3 Deck Green
- HN.4 Deck Bleached Teak
- HN.5 Hull Red
- HN.6 Black

KIT 12
WORLD WAR 1 AIRCRAFT

- HB.15 R.F.C. Green
- HB.16 Clear Doped Linen
- HG.7 German Pale Yellow
- HG.8 German Green
- HG.9 German Purple
- HG.10 German Light Blue

ALSO

THREE NEW AUTHENTIC MILITARY COLOUR KITS

(not available as separate tinlets)

21 COMBAT UNIFORMS

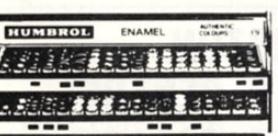
- HM.5 Field Blue
- HM.6 Field Grey
- HM.7 Khaki Drab
- HM.8 Khaki Drill
- HM.10 Navy Blue
- HM.11 Black

22 CEREMONIAL UNIFORMS

- HM.9 Scarlet
- HM.12 Dark Blue
- HM.13 Dark Green
- HM.14 White
- HM.15 Flesh
- HM.16 Crimson

23 MILITARY EQUIPMENT

- HM.17 Gun Metal
- HM.18 Brass
- HM.19 Dark Wood
- HM.20 Silver Plate
- HM.21 Leather
- HM.11 Black



LOOK FOR THE LOCKER

HULL · YORKSHIRE

HUMBROL

150th Anniversary
1910-1960

These Authentic Colours are the result of research to establish shades identical to the originals. They produce a special flat ultra thin film which does not obscure minute detail and dries in three minutes without brush marks. Recommended retail price 9/9d. per kit. Individual tinlets 1/9d. each.

PLASTIC MODELLERS!

THIS IS YOUR BOOK

HOW TO GO PLASTIC MODELLING

by Chris Ellis

Editor of AIRFIX Magazine
PRICE: 25s net (UK)

USA and Canada \$3.50
France 16.00 Frs Fr
Belgium 165.00 Frs B
Switzerland 14.00 Frs Sw
Germany 13.00 DM

(2nd Printing now ready, includes updated appendices)

An essential and comprehensive guide to plastic modelling. Ten chapters covering such topics as: basic assembly, detailing, converting, modelling materials, tools, painting, transfers, markings, research, display, maintenance and scenic settings.

176 pages 8½ in. by 5½ in., 80,000 words, 79 pictures, 7 pages of scale drawings, numerous sketches in the text.

Among the 14 kit conversions described in detail in the book are: Tomahawk 1:72, Roc 1:72, Fury 1:72, T-62 1:76, PzIV 1:76, Churchill AVRE 1:48/1:76, USS Antietam 1:1,250, Spitfire XVI 1:72.

Appendices give full lists of: paints, transfers, main manufacturers, main stockists, glossary of terms and commended kits.

Published by

PSL

Patrick Stephens Limited,
9 Ely Place, London, E.C.1
(01-405 2297)

Use this order coupon to obtain a copy of this magnificent book—post it to the publishers or hand it to your bookseller or model shop now. If you prefer not to cut your magazine—write your order out on a piece of plain notepaper.

To: Patrick Stephens Ltd.
9 Ely Place,
London, E.C.1

OR YOUR
BOOKSELLER OR
MODEL SHOP

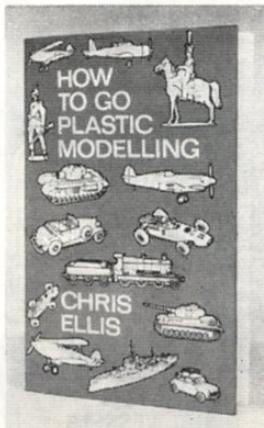
Please send me one copy of HOW TO GO PLASTIC MODELLING by Chris Ellis. I enclose my remittance of 25s. (plus 1s. 6d. extra for postage and packing)

NAME.....

ADDRESS.....

Block
caps
please.....

(3/69)



MODELS

AURORA KITS 5/- each

Piper Apache	1/64	4/-
Cessna	1/64	3/-
Beechcraft Super	1/88	4/-
Aero Commander	1/82	3/-
Skynight	1/100	3/-
Super Sabre	1/100	3/-
F.94C Starfire	1/85	4/-
F.104 Starfighter	1/96	4/-
B.58 Hustler		

AURORA 1/48, 15/- each

Fokker D.7		
Fokker D.8		
Tiger Moth		
Bell Assault Copter		
Sikorsky S.55		
Piasecki H.21 Work Horse		
Cessna A.37		
Phalz D3		

AIRFIX 1/72, 2/9 each

Auster "Antarctic"		
Albatross D.V.		
Avro 504K		
Bolton Paul Defiant		
Bristol F2B Fighter		
C.A. 13. Boomerang		
Fiat G.50		
Fiat G.91		
Fiesler "Storch"		
Focke Wulf FW.190D		
Fokker Triplane		
Folland Gnat		
Grumman Wildcat		
Hawker P.1127		
Hawker Seafawlk		
Hawker Typhoon		
Jet Provost		
Junkers 87B		
Messerschmitt 109		
Messerschmitt 262		
Mig 15		
Harvard IIB		
R.B. 53		
Polland C.11		
Sopwith F.1 "Camel"		
SPAD VII		
Vickers Supermarine S.6B		
Westland Lysander		
Westland Scout		
Westland Whirlwind		

AIRFIX 1/72, 3/9 each

Aichi D1A-2 Type 96		
Arado 196A-3		
Bristol Beaufighter		
D.H.98 Mosquito		
English Electric		
Grumman Hellcat		
Grumman Avenger		
Starfighter		
Lightning		
Vertol 107		
Kingfisher		

AIRFIX 1/72, 5/6 each

Buccaneer		
Boeing 727		
Bristol 192		
Domino		
Dornier Do 217E-2		
Junkers 88		

I/50 motorized A.F.V., 14/11 each

U.S. M-46 Patton		
Russian Stalin Tank		
Japanese type-61 Tank		
Rommel Tank		
Chieftain Tank		
I/32 U.S. Amphibious Weasel	29/11	
I/35 Armoured Car Puma III	23/11	

**ORPINGTON
MODEL CAR CENTRE
49 HIGH STREET, ORPINGTON
Tel: Orpington 30503**

Cut coupon along dotted lines

AIRFIX magazine

MODELS

FROG 1/72

Blackburn Skua	4/-
Bleriot	3/-
Bristol Beaufort II	4/-
Gipsy Moth	3/-
D.H.110	3/-
Dewoitine D.250C	3/-
Fairey Grouse	4/-
Fairey P.D.1	4/-
Fairey Gannett A.S.4	4/-
Southern Cross	6/9
Fokker D.21	3/-
Hotspur II	3/-
Heinkel 219A	5/8
Macchi Fulgore	3/-
B.26 Martin Marauder	6/9
Miles Magister	3/-
Morane Solnier MS.406C	3/-
Bristol Blenheim Mk.I or IF	6/-
Emily Flying Boat	32/6
Renzan Rita Bomber	22/5
Mohawk	7/6
Viggen	7/6
B-47 Stratojet	39/11

AURORA 1/48, 15/- each

Black Maria Triplane		
Nieuport 11		
Sopwith Camel		
S.E.5 Scout		
Albatross D-3		
Fokker DR-I Triplane		
Nieuport 28		
Lockheed F-90		
B-58 Hustler		

ALMARK TRANSFERS

Full range at 3/- per sheet

ROCO MINI TANKS

Full range

REVELL KITS

Sky Rocket	1/54	7/2
Starfire	1/65	7/2
Thunderstreak	1/54	7/2
Skyhawk	1/50	7/2
Junkers 88	1/72	9/6
Phantom F.4K	1/72	9/6
Spitfire	1/32	15/6
Messerschmitt	1/32	15/6
Sopwith Camel	1/28	28/9
Fokker Triplane	1/27	28/9

MARUSAN 1/100

Corsair		
Mig 19	5/11	
Skyhawk	5/11	
Lightning	5/11	
Mirage	5/11	
Fiat 91	5/11	

REVELL AIRCRAFT 1/32,

15/6 each		
Wildcat		
Zero		
Bell U.H.I.D. Huey		
Huey Attack Helicopter		
Sikorsky Skycrane 1/72		
P.B.Y.5A Catalina 1/72	13/9	

TAMIYA 1/50

Spitfire		
Messerschmitt Me-109	7/11	

Post and Packing

Up to 10/-	—	1/-
Up to £1	—	2/-
Up to £2	—	3/-
Up to £3	—	4/-
Up to £4	—	5/-
Up to £5	—	6/-
Over £5	—	Post Free

**21/-
each**

SUPERMARINE SPITFIRE MK. I-XVI
IN RAF-RAAF-SAAF-RNZAF-RAF & FOREIGN SERVICE
N°4



**SPREY
PUBLICATIONS LTD**
P.O. BOX 25,
707 OXFORD ROAD,
READING, BERKS, ENGLAND.

No. 1 P-51D Mustang

Publication date 27th September, 1968

No. 2 P-47 Thunderbolt

Publication date 18th October, 1968



MAIL ORDER today for your AIRCRAFT BOOKS

...or call
for personal
service

All prices include
postage & packing

AIRCAM AVIATION SERIES	
North American P-47 Thunderbolt in Vol. II, III, IV, V	67/-d
USAAF-RAF Foreign Service	22/-d
North American P-51D Mustang in USAF-USA Service	79/-d
North American P51-B/C Mustangs in USAF Service (No. 5)	48/-d
North American Mustang in RAF-RAAF-SAAF-RNZAFAF-Foreign Service (No. 3)	22/-d
The Battle of Britain (Spitfire, Hurricane, Me. 109)	22/-d
Supermarine Spitfire MK. 1-XVI Merlin Engine RAF-RAAF-SAAF-RACAF-USAFAF and Others (No. 4)	22/-d
Handing the Big Jets - Davies	52/-d
AERO PUBLICATIONS	
Experimental Light Aircraft & Midget Racers	30/-d
The Plane That Changed the World - Ingalls A Biography of the DC3	
Cloth Hardback	48/-d
Messerschmitt Me. 109 (1)	23/-d
Nakajima Ki-84 (Frank) (2)	23/-d
The Curtiss P-40 (3)	23/-d
Boeing P-12 F4B Fighter (5)	23/-d
Republic P-47 (6)	23/-d
Kamikaze (7)	23/-d
Junkers Ju-87 Stuka (8)	23/-d
Dornier DO-335 "Pfeil" (9)	23/-d
Supermarine Spitfire (10)	23/-d
Corsair - Chance Vought F4U (11)	23/-d
Heinkel 100, 112 (12)	23/-d
Heinkel HE 177 "Greif" (13)	23/-d
Messerschmitt Me. 262 (14)	23/-d
Mustang - North American P-51 (15)	23/-d
Messerschmitt BF110 (16)	23/-d
Messerschmitt Me. 163 (17)	23/-d
Focke Wulf FW 190 A3 (18)	23/-d
Junkers (Bombers) (19)	23/-d
The Arado Story (20)	23/-d
Tin Goose. The Fabulous Ford Trimotor - D.J. Ingalls	36/-d
Lufthansa in World War II - Feist & Francillon	36/-d
Russian Aircraft - Hoffmann	79/-d

MOTOR BOOKS & ACCESSORIES (AM)
33 & 36 ST. MARTIN'S COURT ST. MARTIN'S LANE
LONDON WC2 Telephone 01-836 5376

NEW BELLONA D6

7.5 ANTI-TANK STRONG POINT

This latest Diorama set to be produced by BELLONA is based on plans in "BILDHEFT RENZEITLICHER STELLUNGSHAN" and shows in realistic detail a 7.5 cm Anti-tank strong point, complete with forward defence trench with matching gun positions on both flanks. At the rear is the ramp leading to the underground storage position for the gun, with an extended projection to take the barrel. On either sides are the garrison quarters and stores. As usual with Bellona Dioramas, the underground positions are made accessible by means of a lift-off roof (shown in the picture to the side of the model).

SIZE: 16 $\frac{1}{2}$ x 10 SCALE: 00/HO PRICE 11/3. POST/PKG.: 1/3.

RV 9. RIVER BRIDGE IN RUINS

This is a companion model to RV2 River Bridge and shows the same bridge after heavy bombardment, or serious flooding (goes with R4 and R5). Price 3/11. Post/Pkg. 9d.

FULL RANGE OF BATTLEFIELDS AND DIORAMAS AVAILABLE. CATALOGUE 6d. BELLONA MODELING PLASTIC SHEET, SET 1 3/6. POST/PKG. 9d.

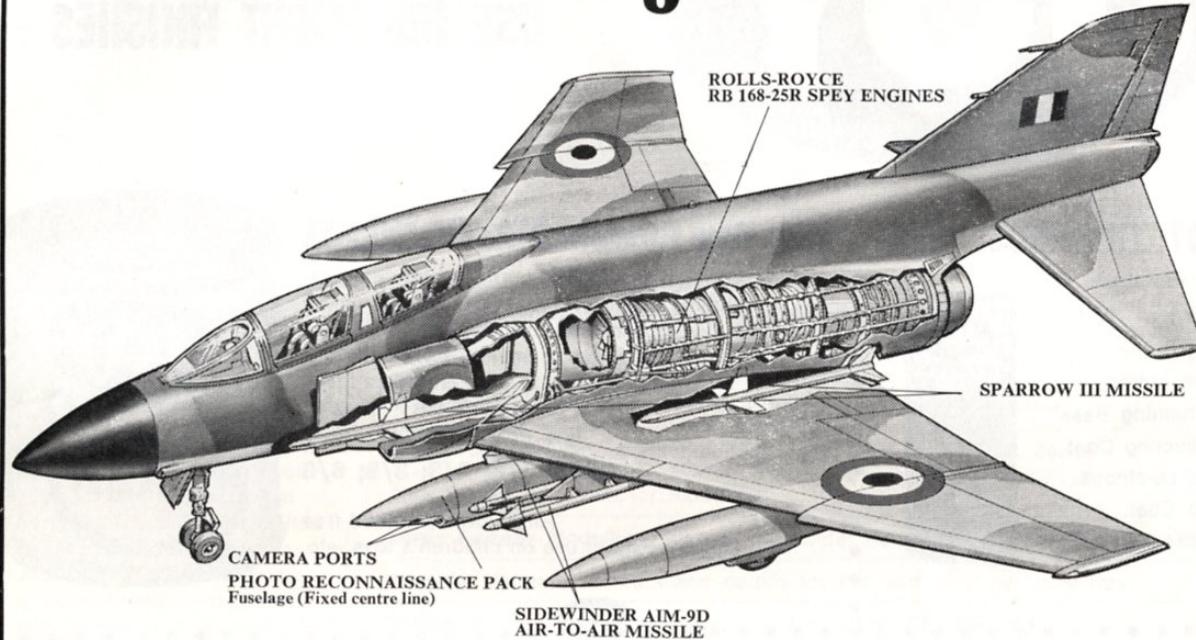
BELLONA A2-9, HAWTHORN HILL, BRACKNELL, BERKS., RG12 6HG



(Figures not included)

BEHIND THE SCENES WITH THE R.A.F.-3

The Phantom-the great all-rounder

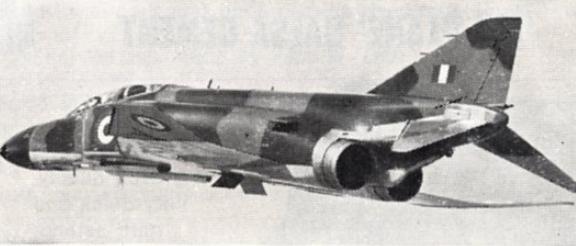


The Phantom is three aircraft in one. It carries five tons of weaponry that can vary according to the mission it goes on: missiles for fast fighter interception; bombs; rockets for ground attack; or a photographic pod for high-definition reconnaissance.

Its strike power is devastating; it can carry eight air-to-air missiles. Its six-barrelled gun can fire a hundred rounds per second.

Packed into its fuselage is a mass of advanced electronics. Wonders like the automatic navigation-attack system. When a map reference of the target is fed into the Phantom's navigation computer, a light appears on the gun sight and indicates to the pilot the target's position. Then there's the pulse doppler radar system, that zeroes on to moving objects.

The Phantom is technically the most complex aircraft in the R.A.F. To fly it and keep it in top operational shape needs dozens of different skills . . . aircrew, technicians, mechanics, fitters, fire-fighting experts, suppliers, administrators, security men—all kinds. And for all of them, the R.A.F. provides a first-class, full-time training. If you're interested in aircraft and technology, the R.A.F. might be the life for you one day. Think about it.



Royal Air Force

THE WORLD OF THE AEROCRAFT
Send this coupon for your free copy of the colour leaflet, "The R.A.F.—it's Supersonic". It tells you more about the R.A.F.—and it opens up into a super wallchart for your bedroom too!

Name _____
Address _____

Date of birth _____

To R.A.F.
Careers Information Service
(956 YCI), Victory House,
Kingsway
London, W.C.2.



From 17 $\frac{1}{2}$ onwards, you could come in as a trade trainee. Or with 5 acceptable O-Levels, you could start training as an officer.



From 15 $\frac{1}{2}$ to 17 $\frac{1}{2}$ you could join as an apprentice. This boy is on a 2-year electronics course. And he gets plenty of sport and adventure too!



Even at 13, you could make a start—in the Air Training Corps. You'd get lots of fun and thrills, and it would be a great help in joining the R.A.F. later





TOP FLIGHT MODELLERS . . .
USE TOP FLIGHT FINISHES

'JOY' LUMINOUS PAINT : 'JOY' New Formula PLASTIC ENAMEL

(Green shade only.)

See in the dark outfits, containing Base Reflecting Coat and Luminous Top Coat. Packs 3/3; 5/6



The 18 beautiful contemporary colours, including black and white, can be intermixed to provide a wide range of colours.

Joy Plastic Enamel has good flow, and is resistant to heat and most fuels.

It gives glass-hard abrasion and wear resisting surface.

Tins: 1/6; 2/3; 3/9; 6/6

All colours are lead free and are safe to use on children's toys, etc.



'JOY-PLANE' Balsa CEMENT



New and improved quality. Very quick and hard setting. Penetrates deeply and is heat resisting and fuel proof.

Available in tubes 9d; 1/4; 2/-



'JOY-PLANE' POLYSTYRENE CEMENT



Non-stringing quick drying and colourless. The perfect adhesive for giving a weld joint to any polystyrene surface.

Available in tubes 9d; 1/4

OTHER PRODUCTS MADE BY MODELLERS FOR MODELLERS

'JOY-PLANE' CELLULOSE DOPES. 1/3; 2/-.

'JOY-PLANE' CLEAR DOPES. 1/3; 2/-; 2/9; 5/-.

PLASTIC WOOD. 1/5.

BANANA OIL. No. 1. Thick.

No. 2. Thin. 1/3; 2/-.

TISSUE PASTE. Tubes 1/3.

These are the recommended retail selling prices



is the registered trade mark of

TURNBRIDGES LIMITED, LONDON, S.W.17

manufacturers of quality products for

STICKING, STAINING, POLISHING, PAINTING

AIRFIX magazine

AIRFIX
magazine
FOR PLASTIC MODELLERS

March 1969

Volume 10 No 7

Editor Chris Ellis

In the Air: 'instant camouflage' and RAF Phantoms by Alan W. Hall	292
News from Airfix: Grumman Duck and Ancient Britons released	294
Wildcat Colours: finishes for the Airfix FM-2 by Robert C. Jones	294
Light Tank 'Kyu-Go': scratch-building feature by Kenneth M. Jones	296
New Books: reviewed for modellers	297
Basic Railway Modelling: Biggin Hill tender details by Norman Simmons	298
Porsche Variants: colours and details for the Carrera 6 by Doug Nye	300
Panzer III: the later models described by Peter Chamberlain	302
Royal Auxiliary Air Force: its aircraft and units recalled by Leslie Hunt	304
AEW Skyraider: radar picket version made by Alan W. Hall	307
Profile: last year's aircraft finishes reviewed by Michael J. F. Bowyer	311
Military Modelling: Sherman BARV 'Sea Lion' conversion by Chris Ellis	315
Roman Friends and Foes: war elephant conversions by Bob O'Brien	316
Sailplan: running rigging for ship models by N.C.L. Hackney	318
New Kits and Models: latest releases reviewed	321
Letters to the Editor: your chance to win a free Airfix kit	324
Photopage: more aircraft pictures from readers	326

Editorial Offices:
PSL Publications Ltd
9 Ely Place
London, EC1
Tel: 01-405 2297

Advertisement Offices:
Stanbury + Treadway Ltd
9 Ely Place
London, EC1
Tel: 01-405 1721

Circulation Department:
Surridge Dawson & Company (Productions) Ltd
Publishing Department, 136/142 New Kent Road, London, SE1
Telephone: 01-703 5480

AIRFIX magazine is published for the proprietors, Airfix Products Ltd, by PSL Publications Limited, on the fourth Friday of each month. Annual subscription rate 36s (USA \$5.50) from Surridge Dawson & Company (Productions) Ltd. Second Class postage paid at New York Post Office, NY.

© All articles and illustrations published in AIRFIX magazine are strictly copyright, and may not be reproduced without written permission from the Publishers. The Editor welcomes the submission of editorial material, which should be accompanied by return postage. Though every care is taken, the publishers cannot accept responsibility for safe keeping of editorial contributions.

ABC
MEMBER OF THE AUDIT
BUREAU OF CIRCULATIONS

March, 1969

A MOST interesting series of experiments in camouflage has recently been carried out by No 846 Squadron at the Royal Naval Air Station, Culdrose. This amounts to 'instant camouflage' which can be varied to suit any temperate or tropical environment so that their aircraft can be painted to match either arctic or desert conditions wherever they may be.

The four Wessex Mk 5 aircraft of 846 Squadron have been involved in trials in which each has been painted in a basic matt finish paint and camouflage colours applied over the base colour in ordinary household distemper.

When I visited Culdrose recently, I saw the four Wessex of the Squadron and was able to see for myself how good

the camouflage can be when used in certain types of country. The four aircraft have base colours in either dark earth, olive green, Devon red and dark brown. According to Lieutenant David Thorn, who is in charge of the camouflage trial, the most favoured colour to date is the olive green with black patterning for tropical camouflage and red for temperate conditions.

On top of these base colours they have tried red, yellow, white, black, mid-blue, PRU blue, dark green, dark sea grey, mid-sea grey and light slate grey. The distemper, when properly applied, does not come off in rain but is fairly easily removed with plain hot water. Whilst I was there I saw two aircraft being painted and later, after having flown in another helicopter to see the effect of the camouflage, saw it washed off again. It takes approximately four hours for one man to apply the camouflage distemper to an aircraft and about twenty man hours to remove it. Twenty pounds



Back from a sortie, the camouflage is scrubbed off.



Top: Contrast in camouflage; nearest machine has black lower sides over green base, while the furthest Wessex has a dark earth base colour only. They are seen over moorland. **Above:** Applying white 'instant camouflage' to the lower sides of the Devon red Wessex. All markings are obliterated except roundel.

of distemper paste are mixed with two pounds of water to camouflage one aircraft.

Indications are that, once the trials have been completed, no self-respecting Navy helicopter will be without its instant camouflage kit tucked in the back of the passenger cabin when on operations. The idea is simplicity itself and the effectiveness was demonstrated by flying two of the helicopters over scrub land not far from Culdrose airfield. From about fifty feet, the Wessex virtually disappeared amongst the trees and all the observer could see were the tips of the rotor blades. At the present time the national markings are the only parts not over-painted. During the demonstration, a Chief Petty Officer approached the aircraft to be painted, and, to a rough pattern, marked a chalk line along the side of the Wessex. Several ground crew members then busily slapped either black or white paint on the aircraft below the chalk mark, covering everything except the roundels.

The new camouflage patterns, whilst doing an excellent job for the Navy in hiding their aircraft under operational conditions, will certainly provide the model maker with plenty of problems. As far as I could see, the camouflage pattern is only approximately applied to a drawing which shows a wavy line along the side of the helicopter from the nose to just below the tail rotor. I was assured that after having done the job several times, the man applying the chalk mark knows exactly where to draw the line, but there are bound to be slight alterations depending on the unit doing the job and the enthusiasm of the painters. With helicopters painted in anything from bright red to dark sea grey, we can expect the modeller to be able to produce an infinite variety of camouflage patterns on his aircraft without the slightest chance of being corrected!

Phantoms at Coningsby

VISITORS to last year's SBAC Show will remember seeing the first RAF Phantom FGR2 in the static park. Since then the RAF has formed No 288 Operational Conversion Unit at Coningsby and now more than twenty aircraft are there. No 6 Squadron, Air Support Command, has started forming and will complete its operational training by May of this year.

The US version of the Phantom is a well-tried aircraft but

its RAF equivalent has 45% of its equipment British made, including two Rolls-Royce Spey engines which deliver about 21,000 pounds of thrust each. The engine starters, radios, ejection seats, and parts of the outer wing panels and the after fuselage are made in the UK. Electronics equipment has come from Cossor and Elliott Automation.

In 38 Group, Air Support Command, the Phantom will provide offensive support for Army Strategic Command. It will supplement and eventually replace the Hunter which so far has given such excellent service both as a fighter and ground support aircraft. New defence policies require the RAF to pay far more attention to Europe, and last summer the offensive support squadrons for Air Support Command were assigned for use by SACEUR in a European emergency. It has been discovered that in a situation like this, the shortcomings of the Hunter are all too apparent and one of the main advantages that the Phantom now has is a tremendous range plus a very heavy fire power.

I saw some of this when I visited Coningsby recently. Displayed in a hangar was some of the armament that the aircraft can carry. Apart from four Sparrow air-to-air missiles, the Phantom can be equipped with either eleven 1,000 pound bombs, four Sidewinders, or a 20 millimetre multi-barrel Vulcan cannon. Without the bombload it can carry 180 SNEB 68 mm rockets or guided weapons for the ground attack role. Any variation on these different weapon systems can be controlled by the Westinghouse radar and missile control system and the Ferranti inertial navigation and attack system, which together give the capability of attacking targets by day or night in good weather or bad, either in the air or on the ground. Just to add to this tremendous capability, a reconnaissance pack has also been provided to give the Phantom another role in tactical reconnaissance.

Heavier than a Dakota

With armament, crew and a seemingly vast supply of fuel, the all-up weight of the Phantom is about 58,000 pounds, which is more than twice that of a fully loaded Dakota! The amount of fuel it can carry weighs more than the all-up weight of a Hunter alone and gives the Phantom a colossal range. It is, nevertheless, an extremely manoeuvrable aircraft and can really be thrown around the sky. I was told by Wing Commander Howe, the Officer Commanding the OCU, that recently he flew a sortie in which, on a medium fuel load, he flew from Coningsby at high level across Anglesey, let down over the Irish Sea, returned low level to Wales for a reconnaissance sortie and after having got back to Coningsby, had sufficient fuel for a diversion of over six hundred miles.

The RAF is to have more than one hundred Phantoms. Originally designated the F-4M, this variant first flew on February 17, 1967, and the first production aircraft arrived in Britain on August 20 last year. The aircraft are ferried to Aldergrove, Northern Ireland, where final modifications are incorporated by No 23 Maintenance Unit, before delivery to Coningsby. The specialist interceptor version, the Phantom FG1, will be flown by RAF Strike Command and the first of three squadrons will start forming at Leuchars, Fife, in the latter half of 1969.

All of the instructors who are at present flying the Phantoms have completed courses in the United States. No 228 OCU is divided into three squadrons. One is responsible for the flying conversion and air defence training, and the other for strike/ground attack and reconnaissance training. The third squadron conducts engineer training for ground crew. Initially the majority of crews are being selected from officers



Top to Bottom: RAF Phantoms at Coningsby. XT899 streams its braking parachute on landing. XT891 ready to start engines. XT893 showing the serial digits repeated as a code on the fin. Under sides are white. Note how top colours are extended to under-edge of wings.

who have already completed flying tours on fighter/ground attack or reconnaissance squadrons. Navigators begin their course with a six week lead-in period covering theoretical and practical training in the missile control system procedures and the theory of the inertial navigation attack system. They are joined by the pilots and together the crews attend two weeks ground school learning the aircraft systems and operating methods.

The flying training covers conversion to the type, in dual controlled Phantoms as necessary, air defence, reconnaissance and strike/ground attack. Practice weapons sorties are flown on the ranges. Altogether the crews complete about one hundred flying hours before becoming operational.

Markings

All of the Phantoms that I saw at Coningsby, with three exceptions, were in the late XT range starting with XT891. The three outside this range were XV395, '395 and '396. The aircraft were painted overall grey/green with the camouflage extending just over the under-edge of the wing. All under surfaces were white and the three figures of the serial were painted in this colour near the top of the fin. The serial itself was in black just forward of the fin leading edge on the fuselage. Sparrow and Sidewinder missiles, where installed, were in a medium blue.

Whilst walking round the line-up of aircraft I noticed that several had an unusual marking on the white panel of the red, white and blue tail stripe. On investigation I was told that this appeared after several aircraft had been diverted to RAF Coltishall and had to stay overnight. During the night the Phantoms' rivals on the Lightning OCU had painted the Station's crest on the visitors' aircraft!

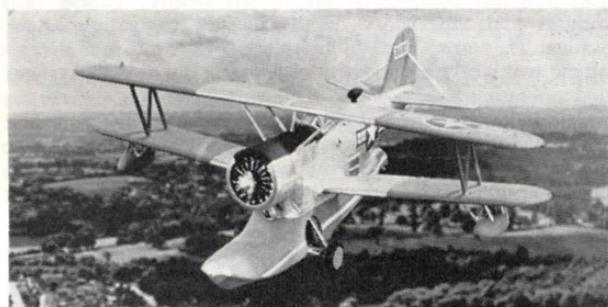
NEWS FROM **AIRFIX**

The world's greatest value in construction kits

Grumman Duck

Ancient Britons

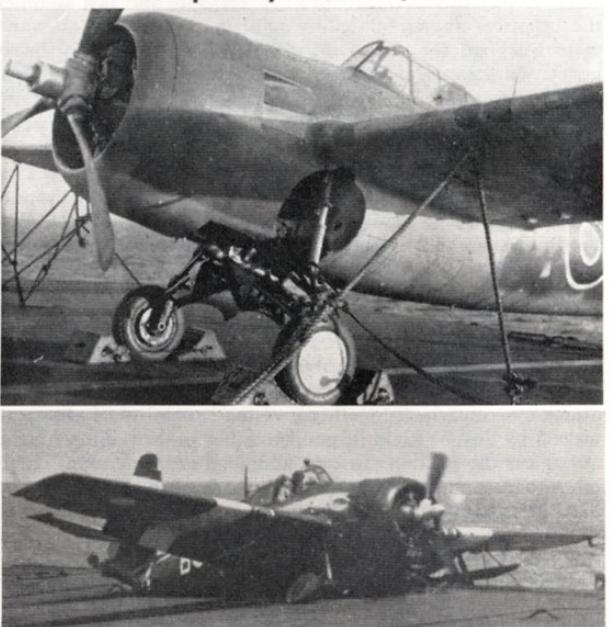
A 1:72 scale kit of a workhorse of the US Navy and Coast Guard is a new introduction to the Airfix Aircraft Series 2. The Grumman J2F-6, known as the Duck, was a single-engined biplane floatplane that first flew in 1933 and subsequently did service on air-sea rescue operations, photo-reconnaissance, target towing and as a light transport. When based on US aircraft carriers it was fitted with an arrester hook and catapult points. Although normally unarmed, a flexibly mounted 0.30 inch machine gun was sometimes fitted in the rear cockpit and up to 650 lb of bombs could be carried. The kit has the usual wealth of surface detail and optional transfers for either a wartime finish or a colourful post-war 'Rescue' aircraft. Price of the boxed kit is 3s 9d.



LATEST addition to the Airfix range of OO/HO scale figures is a fine set of Ancient Britons produced as 'opponents' for the Airfix Romans set. Priced at 2s 9d the set, each box contains 43 pieces, allowing the modeller to make up two complete war chariots with drivers and spear carriers, plus 25 other warriors which include men with axes, slingers, swordsmen, archers, and spearmen, two wounded men, and a standard bearer. There is a good selection of poses and dress variations; and detail is finely reproduced. In next month's issue, Bob O'Brien will be describing colours and adaptations for these Ancient Briton figures in his 'Roman Friends and Foes' series.

COLOUR SCHEMES FOR THE AIRFIX WILDCAT

Compiled by Robert C. Jones

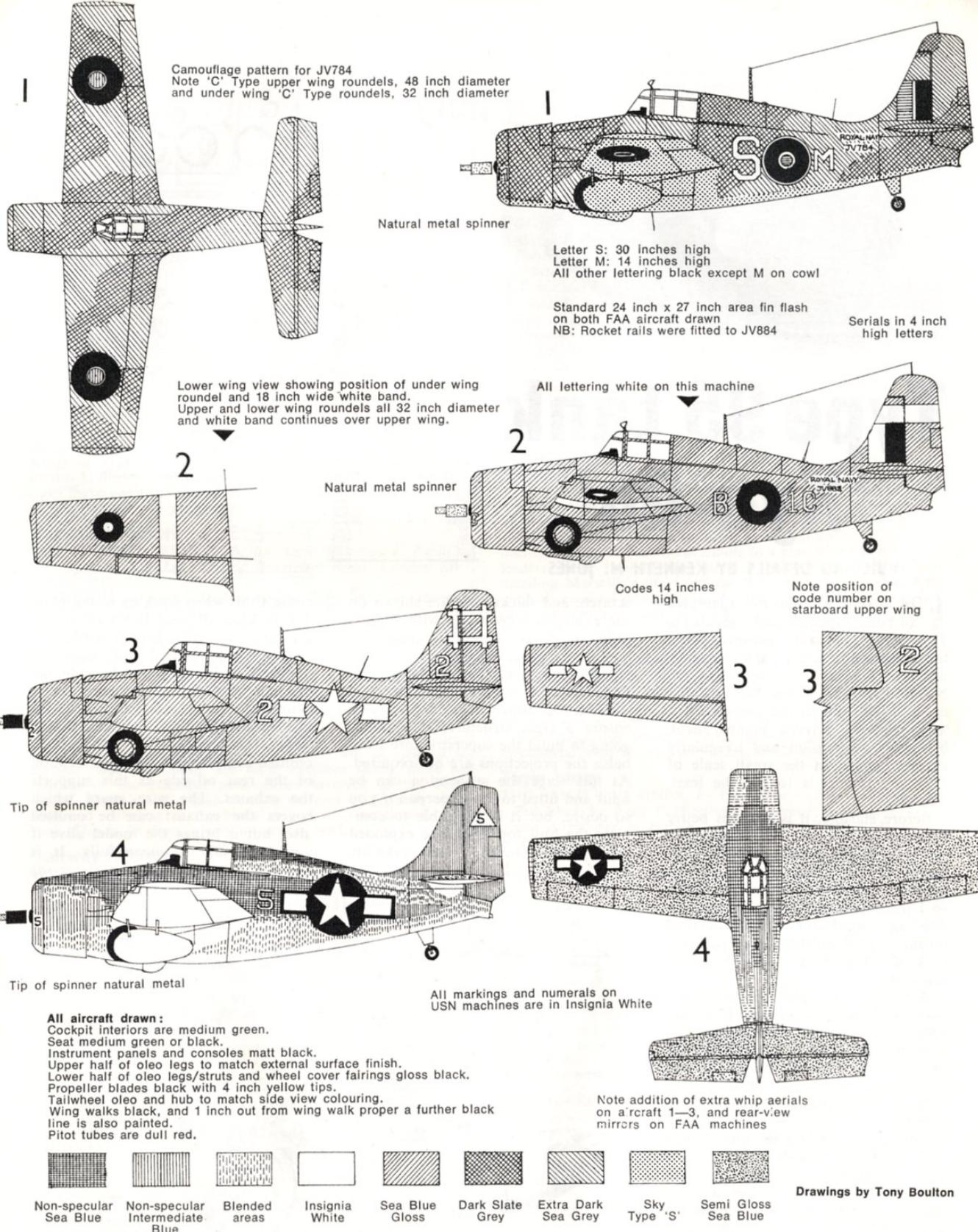


Top: Details of undercarriage on Wildcat VI. Note that on all FM-2s (and Wildcat VI) the upper portion of the undercarriage struts, etc, was painted to match external under-sides finish as was the inside of the wheel well. The lower half of the struts and the insides of the wheel well fairings had gloss black protective paint. Wheel hubs matched the surrounding paint shade (Photo by K. Atkinson). **Above:** JV884 of 882 Squadron FAA, East Indies Fleet, crashing on the flight deck of HMS Searcher. Note the last three digits of the serial repeated on lower rim of the cowling. The letter 'C' on the front edge of cowling is almost obscured in this view by propeller blades. Also note white canvas patches over wing gun ports (Photo by R. Williams).

All colours indicated on drawings are available ready-mixed in Humbrol and Official ranges. Markings can be adapted from kit transfers or taken from commercial ranges as necessary.

Key to drawings opposite:

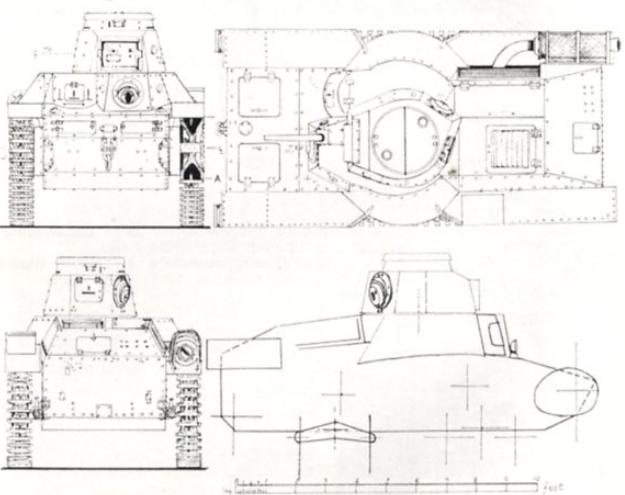
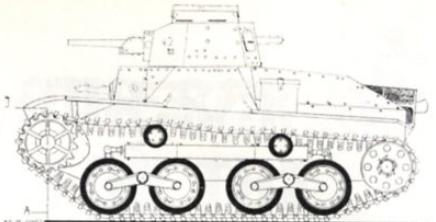
- Wildcat VI, JV784, HMS *Campania*, 1943-4. No 825 Sqn FAA. '784' (serial number) repeated on lower front rim of cowl. Note white letter 'M' on each side of cowling.
- Wildcat VI, JV884, HMS *Searcher*, East Indies Fleet, 1945, No 882 Sqn FAA. Serial number 884 repeated on lower rim of cowling. Letter 'C' on side edge of cowling.
- FM-2 '2' USS *Rudyard Bay*, 1945. Note on Sea Blue Gloss overall finish, wheel wells match external finish; interior of fuselage at this point matt black.
- FM-2 from USS *White Plains*, 1944. Note wheel well and insides of fuselage in that area Intermediate Blue; undercarriage oleo and struts as on FAA machines.



Drawings by Tony Boulton



1:76 SCALE



Type 95 tank 'Kyu-Go'

BUILDING DETAILS BY KENNETH M. JONES

FOR anyone who has not attempted to build Japanese tank models the Type 95 is a daunting prospect. With the exception of the Type 92 tankette, which is of a more angular design (see November, 1967, issue), the modeller is faced with the curved sloping sides, 'bay window' driver's compartment, bell-crank suspension and irregularly shaped turrets. In the small scale of 1:76 the project is to say the least, difficult.

Before starting, it is perhaps better to decide if you want super detail or just the plain model. As is usual, beginners are advised to leave the rivets to experts. I am not an expert so I made a compromise between the two and went for a semi-detailed finish. If your finished model has the look of a Type 95 you should be well satisfied.

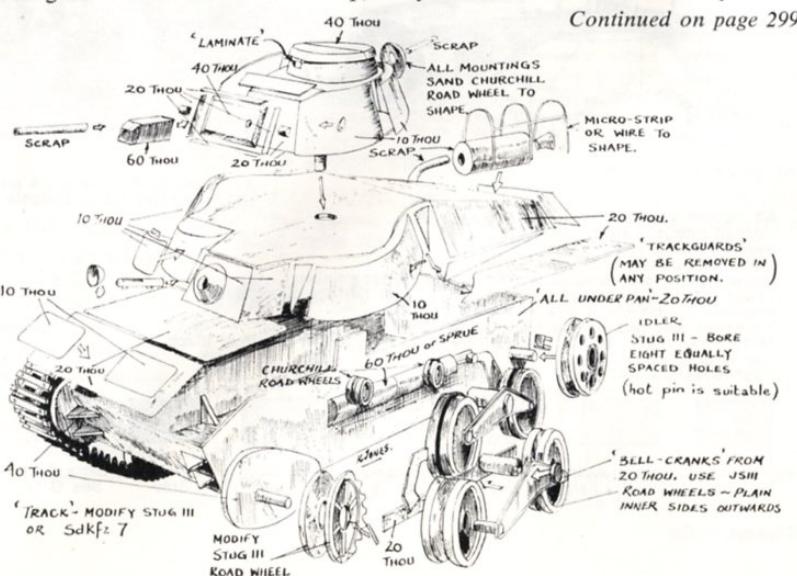
A glance at the plan will show that two methods of construction are apparent. One is to build up the hull face by face, which I did, and the alternative is to carve the upper hull from balsa wood and plate it over with 10 thou plastic sheet or thick paper.

The suspension is a mixture; I used Airfix JS3 road wheels for the bogies and StuG III road wheels for the idler and sprocket. If you have a well-equipped scrap box the choice is yours. The rest must be built from

scratch, and thicknesses are shown on the exploded view along with suggestions of parts sources (though you could, of course, use others).

Build the underpan, leaving two projections on the hull sides to carry the hull top. Brace where necessary to ensure a rigid structure. If you are going to build the superstructure from balsa the projections are not required. At this stage the suspension can be built and fitted to the underpan if you so desire, but it is advisable to complete the hull top first. The exploded view gives details of the make-up,

Continued on page 299



NEW BOOKS

REVIEWED FOR MODELLERS

Favourite engines

THE ENGINES THAT PASSED, by C. Hamilton Ellis. Published by George Allen & Unwin Ltd, Park Lane, Hemel Hempstead, Herts. Price 45s.

NEARLY fifty pen sketches, or cartoons as they are preferred to be called, and four coloured plates based on his own paintings, form the talking point for a discourse upon a selection of favourite locomotives known to the author. The subjects chosen embrace many lands over a wide period of time which is one of the delights of the book since so much is bound to be unfamiliar. One particular snippet is a sketch and description of a 2 foot gauge American war-surplus 0-4-0 saddle tank built by the Devonport Engine Co, Iowa, at work on constructing the Kingston Bypass in Surrey in 1925. This is so very like the well-known Minitrain HO9 model, invariably referred to as a Baldwin, as to make one think that C.H.E. stumbled on the real prototype in England over 40 years ago.

Zeppelin raiders

THE ZEPPELIN FIGHTERS, by Arch Whitehouse. Published by Robert Hale Ltd, 63 Old Brompton Road, London SW7. Price 35s.

THOUGH individual actions against Zeppelins, like those of Warneford and Sowrey, are quite well recorded, there are not a great many books readily available at present which cover the whole story of German Zeppelin operations in World War 1. This present volume fills the gap admirably with a very readable straightforward account which covers the build-up and development of the German fighting dirigibles, their deployment in 1914-15 as the first 'strategic bombers', over Belgium and Britain, their part in the sea war, and British efforts to combat them. All the important Zeppelin raids and combats are covered in detail and there are 30 pictures, most of which will be new to the average reader. Included are some excellent detail views and pictures of the principal personalities involved in the events related. There is also a map showing the area of Zeppelin operations and including all the bases, targets, etc, mentioned in the book. This is, in short, a very interesting book.

Railway history

A REGIONAL HISTORY OF THE RAILWAYS OF GREAT BRITAIN VOLUME 5—EASTERN COUNTIES, by D. I. Gordon. Published by David & Charles (Publishers) Ltd, South Devon House, Railway Station, Newton Abbot, Devon. Price 50s.

IN common with other volumes in this series, this book is not primarily concerned with the complexities and individual histories of the companies concerned or the technicalities of their locomotives and equipment. Mainly it describes the relationship between the introduction, development and since 1918, the withdrawal of train services and the geographical, industrial, social and economic factors of the region. The 250 pages include several interesting illustrations and there is also an excellent folding map.

Cambrian—continued

THE CAMBRIAN RAILWAYS VOLUME II: 1889-1968, by Rex Christiansen and R. W. Miller. Published by David & Charles (Publishers) Ltd, South Devon House, Railway Station, Newton Abbot, Devon. Price 42s.

VOLUME 2 begins after the take over of the Mid Wales Railway in 1888 and describes how the Cambrian Railways became a main-line railway with daily expresses to London and Manchester. This is also the period of the Welshpool & Llanfair and Vale of Rheidol narrow gauge lines and fascinating branches

such as the Mawddwy Railway, the Van and the Elan Valley. Full account is given of the locomotives, rolling stock and operation of the line, and events since grouping into the GWR in 1922 and nationalisation in 1948 are covered in detail. The 218 pages of text include maps, diagrams, some locomotive drawings and 11 appendices giving summaries of useful information. There are also 46 interesting photographs. This is a most useful reference book for anyone basing a model railway layout in a Welsh setting.

Portuguese railways

RAILWAY HOLIDAYS IN PORTUGAL, by D. W. Winkworth. Published by David & Charles (Publishers) Ltd, South Devon House, Railway Station, Newton Abbot, Devon. Price 30s.

IT is clear from the author's description of his 1967 journey that Portugal (and north west Spain) deserves to be more widely known amongst railway enthusiasts. All the many Portuguese metre gauge passenger lines are described, together with one notable new line under construction on the Spanish north coast and there are several instances reported of steam locomotives in daily use. The appendices include stock lists of all Portuguese locomotives and in addition to the 158 pages of text, maps and diagrams, there are 40 or so excellent photographs. This is well worth reading if your holiday trips take in Portugal.

Air ace

MARSEILLE, STAR OF AFRICA, by Heinz J. Nowarra. Published by J. W. Caler Publications Corp, 7506 Clybourn, Sun Valley, California. Price \$1.95 plus 7% postage.

THIS is only a thin book but the amount of information contained in its covers is not only a valuable contribution to the history of the war but an apt tribute to a man who was one of the leaders in air fighting. The story is exceptionally well written, detailing Marseille's life from the time he joined the Luftwaffe until his eventual death in the Western Desert. He was something of a rebel with a mode of air fighting all his own. During the Battle of Britain he did not meet with success but when he arrived in the desert his prowess came to the fore and he was feared by the Kittyhawk and Hurricane pilots who came up to meet him and his Staffel.

The book is well illustrated with photographs, some in colour, and there are two first rate side view colour drawings of his Bf 109F with its notorious '14' in yellow on the fuselage sides.

We found this book of great interest and can thoroughly recommend it to the enthusiast, despite its high price.

Tiger story

THE PANZER VI TIGER, by Uwe Feist and W. J. Spielberger. Published by Feist Publications, Fallbrook, California, USA, and distributed in Britain by Bellona Publications, Hawthorn Hill, Bracknell, Berks. Price 38s.

LATEST in the Feist Publications series, which has already dealt with the Panther and PzKw IV, this new title is not only bigger, but also better than the earlier books. It is almost entirely pictorial with a couple of pages of brief historical notes on the Tiger, King Tiger, Elefant, and the various prototypes and SP variants. Apart from that, the book is lavishly illustrated by big, clear pictures, many of them rare and hitherto unpublished. There is a particularly good sequence showing stages in the building of Tigers at the factory. There are drawings of all variants and some splendid colour drawings to show typical camouflage. In short, it must be the most detailed pictorial coverage yet offered of a German tank, very nicely produced on good quality art paper. Well worth having if you are a modeller, it is also the title to choose if you've not bought any of these Feist Publications books before.

Half-tracks

SEMI-TRACKED VEHICLES OF THE GERMAN ARMY, 1939-45, by H. L. Doyle and P. Chamberlain. Published by Bellona Publications, Hawthorn Hill, Bracknell, Berks. Price 8s plus 6d postage.

FOLLOWING on the booklets produced by Bellona on German SP equipment, this latest publication is uniform with the earlier series and sets out to record pictorially the prime movers

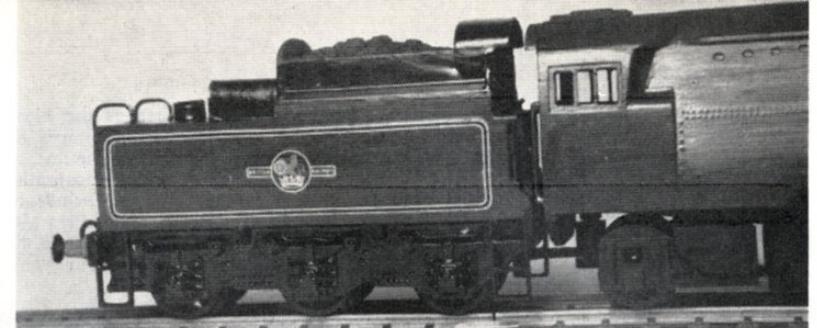
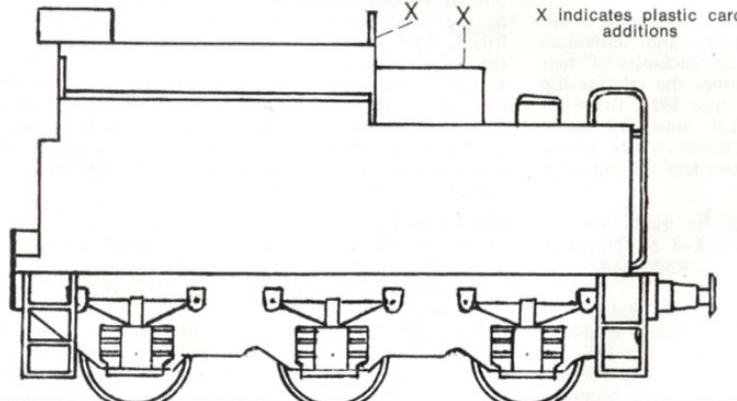
Continued on page 310



BY **NORMAN SIMMONS**

After the modifications to smoke deflectors and cab described last month, the next major visual change in the shape of the 'Battle of Britain' and 'West Country' Classes began in 1952 with the modifications to the tenders. Basically this involved cutting down the side sheets, presumably to improve the look-out when running tender first and to afford easier access to the water tank filler. As a design feature the original concept of full height tender sides continuing the line of the air-smooth casing of the locomotive into an unbroken line with the carriages forming the train was very attractive, especially as the curve of the contemporary Bulleid coach sides matched the locomotive and tender. But as with so many other attempts at visual streamlining and styling, practical considerations must come first. I can well imagine that in their original form the high sides surrounding the tender top would have harboured a slippery mess of coal dust and water which would not have made the job of refilling the tender any easier.

To depict the modified tender in



Close-up of the modified tender attached to the locomotive showing correct application of lining and BR totem. The moulded lining marks have been removed as described last month for the locomotive.

TENDER DETAILS

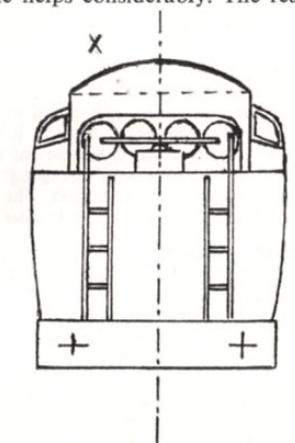
COMPLETING THE BASIC 'BIGGIN HILL' KIT

model form, begin by removing the air cylinder cradles from the tender top, the ladders from the tender back and the raised moulded lining from both the sides. In removing the rear ladders care should be taken to avoid damaging the electric light details. Now cut both the tender sides to the new low height using the side elevation drawing as a guide. The buffer beam and buffers are too high on the tender as built straight from the kit so in modifying the tender back to conform to the new low height, the opportunity can be taken to correct this fault. This can be done simply by removing the buffer beam from the tender back and cementing it lower down on the frames with a spacing piece in between.

After modifying the top, sides and back, the tender body can be assembled in much the same way as described in the Airfix instruction sheet. Plastic card was used to fill in the tops and ends of the side pieces either side of the coal bunker. The rear end of the coal bunker was also given a new curved shape at the top. The photographs and drawings will

give all the information required. The enclosed air cylinder assembly was made entirely of plastic card with discs of 40 thou plastic card cemented at the rear to represent the ends of the cylinders. The Airfix air cylinders were not used as they appeared to be too large. It will be seen from the photograph of the tender attached to 34023 that the four cylinders are contained within the width of the coal bunker, whereas the four Airfix cylinders cemented together are wider than the coal bunker. I must confess, however, that I do not know whether this is because the coal bunker is wider on 34023's tender or whether the air cylinders are smaller in diameter. I suspect the latter.

The front and rear tender steps can be much improved by reducing their thickness. It will be seen from the photograph of 34023 that in reality they were made of tubular steel and although it may not be possible to file down the Airfix steps to such narrow proportions, a clean-up with a file helps considerably. The rear steps



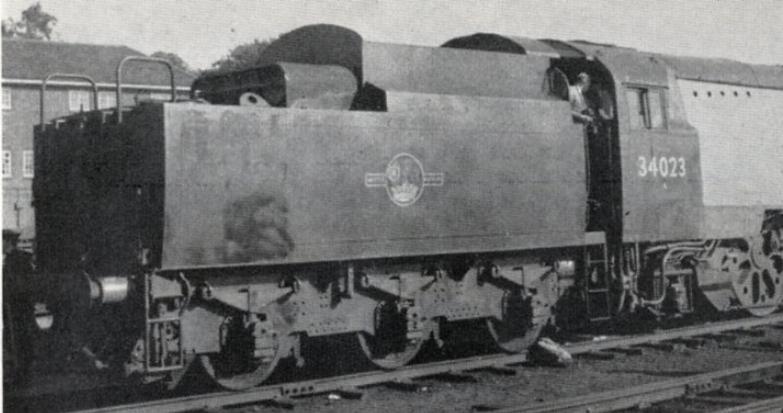
should only have two rungs, not three, and this can be done easily by cutting out one of the rungs and repositioning the other.

Finally, the ladders on the back. It is suggested that these could be made from heated and stretched plastic sprue. Alternatively one can use signal ladder which can be obtained from most model railway shops at around 2s 6d per foot length. This is the method I used. Unfortunately the spacing of the rungs is not correct and results in there being four rungs on the ladder instead of three, but this is not particularly noticeable. Completely authentic ladders could, of course, be soldered up from brass or nickel silver wire but in compiling these articles I am always mindful of the fact that the AIRFIX magazine is intended for plastic modellers. Not everyone has the skill or facilities for working in other materials and some compromise has to be made to keep within these limitations.

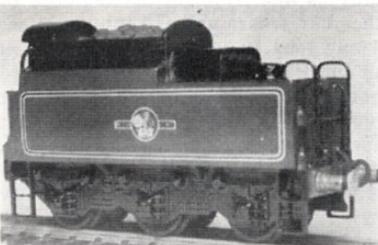
Painting will, of course, be BR green since these tenders only came into being after nationalisation. Lining should be in the form of a rectangular panel similar to the *Evening Star*. If you have a transfer sheet left over from this kit, perhaps as a result of making an all-black 9F, this can be used. Otherwise I recommend the Kingsprint sheet of BR lining dry-print transfers. For the really impecunious it is possible to use the narrow orange lining from the Blick modellers dry-print sheets. This gives a very simplified form of lining, not fully

worth a try; I made mine from Microstrip and a piece of nylon stocking supplied by my wife. Ask first before you go cutting pieces out of stockings as you may find yourself buying a new pair after carving holes in the wrong ones. The little grille above the exhaust outlet on the hull side is from layers of Microstrip, too. This seems to be the most complicated part of the vehicle detail-wise. The spring housings on the hull sides are worth producing accurately also. The housings alone would suffice, but if you can manage it the arms for the suspension and linkage to the box are worth the trouble. The return rollers are from the Churchill, suitably modified.

The tracks can be obtained from the StuG III or the Sd Kfz 7 in the Airfix Flak 88 gun kit, suitably modified and shortened. Either is reasonably accurate.



Above: A view of the cut-down tender of the preserved locomotive 34023, showing the narrower air cylinders as mentioned in the text. Below: Another view of the model tender with correct ladders added and modified steps.



accurate, of course, but reasonable in OO scale.

A few readers have taken me to task over the economics of fitting a Tri-ang chassis to the Airfix 'Battle of Britain' body as described in the January issue. It has been pointed out that as the Tri-ang body can be purchased for 11s, why bother with the Airfix kit? I would like to point out, however, that the Airfix kit does include the chassis and tender parts as well. In describing how the Airfix body could be made to fit the Tri-ang chassis, I also intended

Type 95 tank—from page 296

present themselves; either carve from balsa, laminate plastic card and carve to shape, or build up face by face as I did. Again look to the exploded view for details of the built-up version. I formed the cupola from two thicknesses of plastic card chamfered at the sides and scored across the top to represent the hatches. Vision slots could be put in with the heated blade of a modelling knife, or else marked with black ink and mapping pen after the model is painted.

The hull is not as difficult as the hull in my opinion. Three methods



Above: A view of the completed Type 95 light tank model which is ideal equipment to go with the Airfix Japanese troops. Larger-than-life view is given on page 296 (Photos by Cam Anderson).

making it clear that the Tri-ang body could be made to fit the Airfix chassis, thereby making two complete 'Battle of Britain' class models, one motorised and in steam and the other dead but on show in the loco depot yard. The bodies can be switched as desired to give variety in running. The tender modification described this month is yet another benefit resulting from the Airfix kit and this modified tender can be used equally well with either the Tri-ang locomotive or with the Airfix model.

I am grateful to reader A. Goodall for pointing out that the BR numbers I quoted as 34101-21 should, in fact, read 34001-21, the '100' being dropped from the original SR number sequence after the BR re-numbering. As Mr Goodall also points out, there was a small curved fairing between cylinders and buffer beam on the earliest engines. This is featured on the Tri-ang body.

I painted my model two shades of green merging in a wavy pattern with little national flag markings and oil stains in the appropriate places. I would like to thank the Curator and staff of the Royal Armoured Corps Museum for their help with suspension details and other dimensions from which I produced the drawing.



Left: A further finish idea for the Airfix model. This car raced in '67 in bright red, with natural metal lower panels, 'Wicky Racing Team' in white aft of the front wheel arches and 'Porsche' in black on either side. Kit or model is used as supplied.

Porsche cars and colours

DOUG NYE SUGGESTS TREATMENT FOR THE AIRFIX MODELS

WHEN the Porsche Carrera 6, or Type 906, first appeared on the circuits in 1966 it was an instant success, and since then has become one of the most popular subjects in the slot-car modelling world as well. Airfix's slot and static 1:32 scale versions of the car are just two of the vast range that offer so many conversion and alternative finish possibilities, and details of a few of these are included in this feature. The idea here is to provide sufficient information for an easily identifiable miniature to be produced, not for one which is faultless in every single detail.

The two conversions, which will, I hope, appeal to the more experienced car modeller, are for the long-tailed Le Mans versions which finished fourth, fifth and sixth and won their class in the '66 24-Hours race, and for the lightweight European Hillclimb Championship-winning car used in the same season. Some alternative finishes are also described for the standard model. Right then, here goes . . .

Porsche 906LM—Le Mans 1966: For the fast Sarthe circuit, Porsche engineers developed a modified nose and extended tail in order to minimise lift and reduce drag at the high speeds reached. After much thought it seems that the simplest way to carry out this conversion on the Airfix model is by using balsa wood in the manner advocated by Alan Hall for the more complicated aircraft conversions. It is strong and resilient enough to survive some arduous slot-racing, while when properly prepared and painted is attractive enough for a first-class static model.

The standard tail must be sawn off aft of the rear wheel arch and the end of the rear screen. Another saw-cut is then made to remove the tail transom, complete with its tail lights, from the severed section. Now we come to the balsa, a block measuring 32 mm x 18 mm x 50 mm being about the right

size. The new tail in fact must project only 28 mm from the trailing edge of the rear wheel arches, but the other 4 mm may be used as a tongue to fit up inside the open end of the standard body shell to improve the bond. The block must butt up against the rear extremity of the standard rear screen, and finally the transom of the original may be cemented to the new tail after minor mods to the spoiler. The LM cars did not carry full-width spoilers, merely tabs on either side.

Measure 6 mm inboard on the tail spoiler from a point directly above the inside rim of the tail-lights and mark both points. Then carefully saw and cut away the rest of the upper spoiler, rounding the tail at the sides and leaving just the two 6 mm wide tabs standing. Any holes in the shell may now be plugged with body putty, while the balsa itself may be sealed and painted.

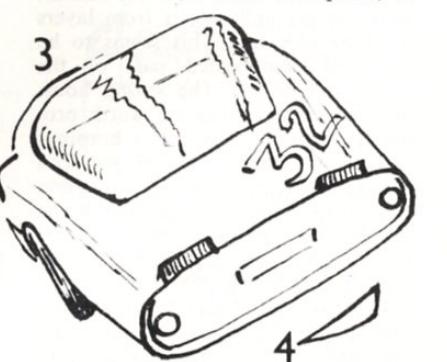
At the front, minor surgery is sufficient to achieve the correct appearance. The side intakes should be reduced to circular ducts at their inboard ends—plug the outer ends with putty once more—while a central intake slot must be made. Leave a clearance of 1-2 mm inboard from the side ducts and drill two $\frac{1}{16}$ inch diameter holes on either side right on the nose's 'knife-edge'. Carefully join these holes with a fine saw; file the ragged edges clean until the appearance is that shown on the photograph. Finally, cheek spoilers must be added in the position shown on the photo. These are cut from plastic card to the shape drawn and are cemented in place—they will necessarily be rather flimsy and may be omitted on a slot-car.

Overall LM colour scheme was white with natural metal lower body side panels. The clearly defined nose panel was finished in a bright day-glo identification colour, the team using living pinks, greens and blues usually.

Race numbers were 30, 31 and 32, and, for added realism, 32 carried the road registration number S-XR 760 on a white rectangular panel forward of the nose-top air intake and on the tail transom, while all cars carried BP stickers on the body sides just aft of the front wheel arches.

Porsche 906 Bergspider: This, simply, was a lightened Carrera 6 fitted with an eight-cylinder engine as opposed to the six-cylinder unit in the standard road racer. Snap the interior decking out of the model and remove the window transparency. Cut away the rear screen complete (leaving the tongue of plastic which fits under the 'roll-over bar' intact), and also carefully saw away the central roof panel of the transparency. Also remove the small roof section of the opaque body shell to leave the car open with—when the windows are in place—side screens which curve up over the driver and almost, but not quite, meet at the top.

While the deck is out of the shell, mark out the size and shape of the rear deck depression, the part carrying the slots and six injection trumpet mouths for the engine, on to thin plastic card. Immediately behind the driver's head, cement a 3 mm deep piece of scrap plastic, 35 mm wide, to raise the forward end of the new plastic card deck by that amount. Cement the new deck into place, to



AIRFIX magazine

the interior deck at the rear and to the new 3 mm deep spacer at the front. After painting the cockpit deck, now replace the modified window transparency and cement the complete modified deck into the shell.

If you hold the shell side-on, you will see the lip which originally matched the rear end of the old rear screen standing proud. This must be pruned or sanded off leaving a smooth match with the new plastic card rear deck. Body putty carefully over the joints at rear and sides until the rear deck appears quite smooth with a faired roll-over bar rising out of it on either side and arcing up and over behind the cockpit.

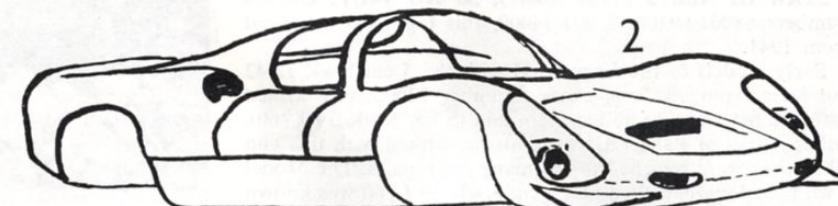
Before painting, it only remains to cement two flat-based, curved top pieces of scrap, 15 mm long x 4 mm wide x 2 mm high on to the forward end of the new deck, 4 mm back from the rear edge of the cockpit area and with their inboard faces 10 mm apart (5 mm either side of the centre-line). These represent the gauze intake covers of the eight-cylinder engine, and should be painted silver with a mesh pattern cut into the paint before it is fully dry with an old pen nib or pointed knife blade tip.

Minor modifications to the nose concern changes to the lights. The rectangular lights on the lower light steps must be discarded and the circular lamps from the upper step cemented in their place. Carefully snap the light glasses away and then relocate them after the change has been made. As shown in the drawing, the Bergspider's light glasses had rounded corners, and these may be produced at the painting stage. Colour overall, again, is white, with another livid identification panel on the nose and natural metal lower body sides. Cheek spoilers on the nose are exactly as per the LM conversion.

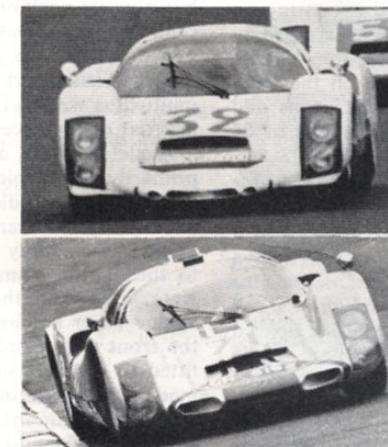
Colour Schemes

Firstly, as a postscript to the 906LM conversion, one of these cars was raced with outstanding success in 1967 by the Swiss pair of drivers, Steinemann and Spoerry, and they had their car painted bright red overall, with a broad white stripe over nose, roof and tail. Lower body sides were still silver grey. This makes a very attractive optional finish for the conversion.

Targa Florio winner, '66: This car was white overall with three longitudinal colour bands on the nose panel. Looking at the car head-on, these were red, white and blue from left to right.



Bergspider shell sketch



Top: One of the Porsche 906LM Langheck (longtail) models at Le Mans. Note size and shape of nose intakes and positioning of cheek spoilers under headlights. The number plate is also visible. **Above:** The private De Udy 906 mentioned as an alternative colour finish for the standard body shell. Note the numberplate and the roof intakes.

Ahead of the nose-top intake was a white number plate, carrying the number S-XR 42. Race number was 148 carried on the nose panel aft of this forward intake and on both doors. Only a nearside wing mirror was carried. Body was standard.

Hugus-Cannon 906, Sebring '67: This particular vehicle was remarkable only for its colour scheme, for it was yellow overall with black Tiger-stripes over the whole thing, radiating from the number 42 on a white disc on the nose panel, and sloping forward from top to bottom along the sides, front to rear over the roof and top to bottom on the tail transom. Makes a very colourful finish to the absolutely standard model.

Above: (1) Full-size 1:32 scale sketch for extended tail of the 906LM Langheck showing the balsa insert. (2) Sketch of the simple Bergspider conversion which involves removal of cockpit roof and detail changes on nose as for 906LM. Sketches on page 300 show (3) the rear of the 906LM Langheck with small tab spoilers and number position, and (4) full-size drawing for cheek spoiler—two required.

Bradley 906, RAC Sports Car Champion '68: This vehicle is white overall with a broad pale blue stripe running over the nose, roof and tail edged with thin lines on either side of the same colour. Lower body sides, again, are natural metal; coloured body sections on the full-size machines being in glass fibre.

De Udy 906, '67: This vehicle I have chosen for its tasteful colouring, arranged in the pattern shown on the photograph. Colours are pale green overall with dark green striping. Lower body sides are as per usual, note the taping round the nose panel, road number plate (QH 6182) and intake and vent on roof, common to many Carrera 6s.

NEWS FROM IPMS

THE January London meeting of IPMS was attended by a record number over 90 being present including visitors from Yorkshire and USA.

The next London meeting will be held at St. Mark's Church Hall, Balderton Street W1, on February 28, when an Open Forum will be held on the subject of modelling with styrene sheet. A competition for aircraft of the Desert Air Force will be held in addition to the normal class competition.

The IPMS AGM will be held on March 28 at Maples Restaurant, Tottenham Court Road; doors will open at 1730 and business will commence at 1830. Films to be shown after the AGM will be mainly military.

In addition to the London meetings, seven other UK branches hold regular meetings. A further four branches will be holding regular meetings shortly. Details of these and of membership are available from the Membership Secretary, 17 Cranleigh Court, Cove, Farnborough, Hants.—P.L.

Part 3: Models J to N

ATER models of the Panzer III incorporated the basic mechanical and structural changes introduced in the Model H, but with further armour and armament improvements.

PzKw III Ausf J (Type 8/ZW), Sd Kfz 141/1: Chassis numbers 68001-69100, 72001-74000, this type was produced from 1941.

Early models of the J appeared with the 5 cm KwK L/42 but later J models from chassis number 72000 were armed with the new long-barrelled 5 cm gun (5 cm KwK 39 L/60). Other marks of Panzer III were also re-armed with this gun when they were returned to Germany for repairs. The Model J with the long-barrelled gun 5 cm KwK 39 L/60 was known by the British as the 'Mark 3 Special'.

The track assembly was as on the Model H, but now the hull MG was mounted in a prominent ball mount and the driver's visor was a new design replacing that appearing on the Models G and H. The basic armour was increased in thickness to 50 mm front and rear and 30-32 mm on the sides. Spaced armour was fitted to this vehicle on the front superstructure and gun mantlet. Weight was 21.5 tons and the vehicle carried either 99 5 cm rounds (L/42 gun) or 84 rounds (L/60 gun).

PzKw III Ausf L (Type 9/ZW), Sd Kfz 141/1: Chassis numbers 74101-76000, this type was produced from 1941.

The long-barrelled 5 cm KwK 39 gun was fitted, with a torsion bar compensator to balance it. Early models had a coil spring but this was found insufficient to counterbalance the extra weight of the lengthened barrel and the spaced armour that was sometimes fitted to the gun mantlet. Spaced armour consisting of 20 mm plates was also fitted across the front superstructure; it was cut away to clear the driver's visor and episcopic apertures. A circular hole was also made

Below: Typical early model up-gunned and refitted to bring it up to later standards. This Ausf F has the 5 cm L/42 gun, additional 30 mm bolted armour, the wider 400 mm tracks, re-spaced return rollers, and spaced armour on the visor plate. Compare with the less elaborately altered Ausf F shown in the last instalment. **Bottom:** Early production PzKw III Ausf J.



to give free movement to the hull ball mounted MG. 78 rounds were carried.

This vehicle carried the normal five chamber smoke device, but now its position had been changed and it was mounted centrally underneath the tail plate of the engine superstructure between the air outlets. With this model, the loader's vision port on the right side of the gun mantlet was omitted as well as the vision ports on each side of the turret in front of the access doors, on all but early vehicles.

Model L (Tp), as its designation implies, was designed primarily for tropical warfare and was in fact used extensively in the Middle East from 1942-1943. To improve the habitability in desert warfare, minor modifications were embodied. Air supply was trunked from the engine bulkheads to the fighting compartment, oil filters of improved design were fitted, and there was a change in the design of the engine cover hatches. Single doors, one each side, hinged to the front were fitted instead of the double doors. The doors fitted to the rear superstructure for access to the fans were made larger than in the previous models and were provided with similar air intake cowls as those on the engine covers so that they could take air from all sides instead of only from the rear as previously. Also fitted was a curved sheet metal strip, fitted under the air outlet in the rear superstructure to deflect the air flow from the ground and so raise less dust.

Some Model L vehicles were later fitted with the short 7.5 cm gun and re-classified as Model N.

PzKw III Ausf M (Type 10/ZW), Sd Kfz 141/1: Chassis numbers 76001-78000, this model was produced from 1942.

Model M was practically identical to the L, but incorporated a number of modifications. Similar in armament and spaced armour, the smoke apparatus of this model now consisted of one set of three 90 mm smoke generator dischargers Nb.K.Wg fitted each side of the turret. The stowage for the 5 cm ammunition was considerably altered from that of Model L; additional rounds could then be carried.

In addition to the torsion bar balancing gear for the long 5 cm gun as fitted in the Model L, a small auxiliary coil spring was also fitted to compensate for the weight of the spaced armour on the mantlet. There were no escape hatches fitted into the hull side, and on most Model M vehicles, arrangements were made for wading up to a depth of 4 ft 3 inches, sealing devices being installed in the access doors, in the hull, at the hull and superstructure joint and in the engine exhaust system.

PzKw III Ausf N (Type 11/ZW), Sd Kfz 141/2: Chassis numbers 78001-onwards, this was produced from 1942-43. Last of the Panzerkampfwagen III series, production of which finished in August, 1943, this vehicle was a continua-

tion of the Model M production type.

The main armament was now changed to the short 7.5 cm KwK L/24 (rounds: 64) and MGs (rounds: 3,450). Supplementary armour was fitted to the front nose plates, and armour skirting plates were also fitted around the turret and hull sides. Discharger cups for electrically fired smoke generators were mounted in one set of three at each side of the turret. The Model N was either produced as such or converted from Model L; 666 were built or converted. Model N was also called the Sturmpanzer III.

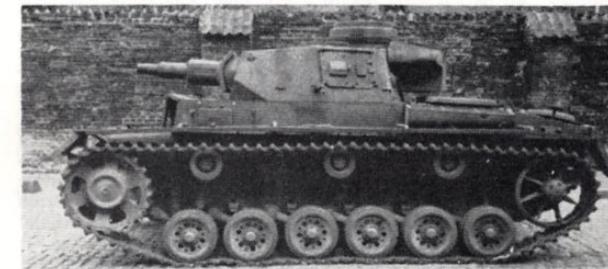
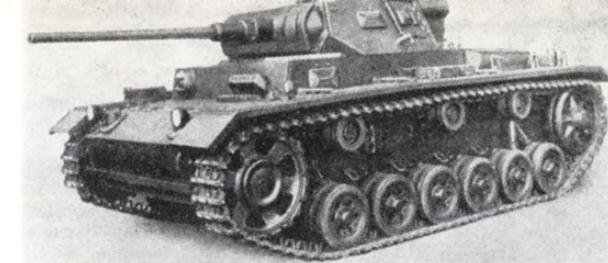
SPECIFICATION

The following typical data refers to the Panzerkampfwagen III Ausf L (Sd Kfz 141/1):

Produced:	1941-1942
Combat Weight:	22.3 tons
Crew:	5 (Commander, Gunner, Loader, Hull-Gunner and Wireless Operator, Driver)
Armament:	5 cm KwK 39 L/60
Rounds Carried:	78. (HE, AP 40, AP with HE filling)
Secondary Armament:	One MG 34 mounted coaxial
MG Rounds Carried:	One MG 34 in hull
	4,950
Length (not including gun):	6 smoke dischargers (NbKwg), 3 a side
Height:	17 feet 9 inches
Width:	8 feet 3 inches
Engine:	9 feet 8 inches
Maybach HL 120 TRM, 300 hp petrol	12 cylinder
Speed:	28 mph on road, 12 mph cross-country
Radius of action:	100 miles on road, 60 miles cross-country
Trench crossing ability:	8 feet 6 inches
Armour Details	
Turret Front:	57 mm
Turret Side:	30 mm
Gun Mantlet:	50 mm
Front Glacis Plate:	25 mm
Front Lower Nose Plate:	50 mm
Front Upper Nose Plate:	50 mm
Side Superstructure:	30 mm
Side Hull Plate:	30 mm

SPECIAL VARIANTS

Panzerkampfwagen III (Tauchfachig) (Submersible): Before Dunkirk the Germans were planning for the invasion of Great Britain. Realising the need for infantry to be supported by armour on the beaches, the Germans formed special armoured units, equipped with Panzers III and IV modified so that they could move submerged along the sea bed at a depth of 25 ft. The vehicles were made watertight, having all openings, vision ports, flaps, etc, sealed with special sealing compounds. The turret entry hatches were bolted from the inside and the air intake opening for the engine closed. Rubber coverings were fitted over the turret cupola, gun muzzle and hull machine gun ball mount, which were designed to be blown off by a small charge upon surfacing. Between the turret and hull was fitted a rubber tube that was inflated with air, thus creating a watertight joint. Air was fed to the submerged tank by a 50 foot flexible hose snorkel device attached to a float with radio aerial. A pump removed the sea water that seeped into the tank. Special barges were to be used to transport the submersible tanks to the point of operations, a ramp was lowered on to the sea



Top to bottom: Late production Ausf J with 5 cm L/60 gun. Early Ausf L with spaced armour on visor and mantlet. Ausf M showing smoke dischargers on turret, and turret vision ports and hull side doors eliminated; also shown is modified exhaust for deep wading. Ausf N with 75 mm L/24 gun; this is one of the vehicles converted from the Model L.

bed, down which the tanks were driven, steering by gyro-compass. Though not used for the invasion of England, these vehicles were employed during the Russian campaign, in 1941 for the crossing of the River Bug. For this operation the flexible snorkel was replaced by 10 foot steel pipe and the exhaust fitted with one-way valves.

Panzerkampfwagen III (Pak 7.62 cm (r)): A limited quantity of captured Panzers III were modified by the Russians and re-armed with the Russian 7.62 mm anti-tank gun. These were given the Russian designation of SU 761. Some of these were later recaptured by the Germans and used by them.

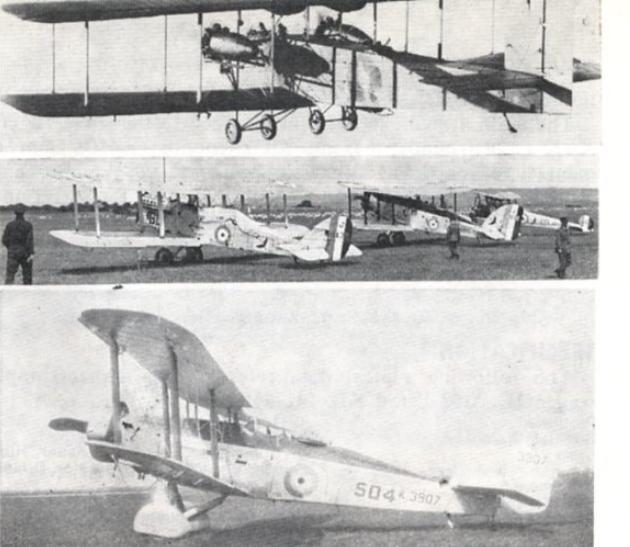
Below: Rare picture shows a PzKw III submersible tank on test. Note the snorkel hose and float.



MUCH has been written—and rightly—about the squadrons of the Royal Air Force during this fiftieth anniversary year and, before it ends on March 31, 1969, perhaps it would be fair to mention, if only briefly, the magnificent part played by the men (and women) of Lord Trenchard's 'weekend air force', for never let us forget that it was his visionary plan which established, just in time for World War 2, squadrons of volunteers 'based on centres of large population'. In the event the creation of Special Reserve squadrons was not an unqualified success and although No 502 (County of Ulster) Sqn, formed at Aldergrove on May 15, 1925, as the first SR unit (volunteers with a strong regular complement), it was the Auxiliary squadrons which drew the greatest response.

Despite the claims of Nos 600 (City of London) and 601 (County of London) Sqn members, the Ministry of Defence confirm that pride of place in AuxAF history must go to No 602 (City of Glasgow) Squadron which began to form between September 12-15, 1925, and which on October 7, received the first aircraft ever flown by an Auxiliary squadron—DH9A serial H144 which the CO, S/Ldr C. N. Lowe, MC, DFC, RAF, flew from Henlow to Renfrew. Little did these pioneer Auxiliaries think that (with 603) they would bring down the first German raiders of World War 2. Via the Wapiti, Hart, Hector and Gauntlet came the Spitfire and, in the Battle of Britain through to Normandy (where 602's aircraft shot up Rommel's car and undoubtedly helped shorten the war) the squadron, under men like Johnstone, Finucane, Deere and le Roux, made history.

Nos 600 and 601 Sqns formed at Northolt on October 14, 1925,

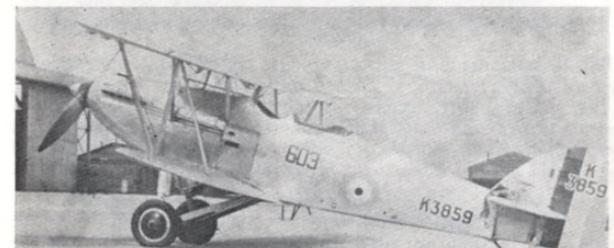


Above, top to bottom: Early days; Hinai of 503 Sqn in dark green with red/blue roundels (Photo by S/Ldr Young), DH9A (J8478), Wapiti (J9855), and Avro 504N (J8708) of 601 Sqn with the famous winged sword badge ('Flight' photo), Wallace of 504 Sqn in 1934-35. Foot of page: Hart of 603 Sqn and Hectors of 614 Sqn in the late 'thirties.

Royal Auxiliary Air Force

LESLIE HUNT RECALLS ITS SQUADRONS AND AIRCRAFT

with DH9As—and considerable rivalry—600's unique claims including the only ex-Auxiliary Marshal of the RAF (Sir Charles Elworthy), F/O Tollemache's George Cross, after his Blenheim crashed in March, 1940, pioneer night-fighting with the Beaufighter, and a brilliant effort in the Middle East under 'Paddy' Green and with 'aces' like Desmond Hughes (now an Air Vice Marshal) and F/Sgt Downing, who got five Ju 52s in one patrol. Post-war with Spitfires and Meteors, 600 Sqn maintained the high tradition and, with a monthly social gathering and regular club flying from Biggin Hill, the squadron association sets an example to all others. No 601 would also have boasted a George Cross winner but P/O Branch, awarded the Empire Gallantry Medal



for rescuing his passenger, F/O Aidan Crawley (later an Under Secretary of State for Air), when Demon K5722 crashed in 1937, lost his life in the Battle of Britain, August, 1940, just before the EGM became the George Cross. Members are proud that the late S/Ldr Roger Bushell ('Big X' of Stalag Luft III) and executed by the Gestapo following The Great Escape) was a pre-war 601 Auxiliary, along with Whitney-Straight, Max Aitken and others of 'The Millionaires Mob' as they were nicknamed. With the Blenheim, Hurricane, Airacobra, and Spitfire (in Malta and the Desert), 601 notched almost 200 victories and, so great was the rush to rejoin in 1946 that former officers cheerfully came in as airmen, with group captains wearing the single stripes of pilot officer and flying officer, just to be back.

In joint second place to 602 also stands 603 (City of Edinburgh) Sqn, starting at Turnhouse on October 14, 1925, with DH9A, then with the Wapiti, Hart, and Hind paving the way for the Spitfires which, on October 16, 1939, shot down a Heinkel 111 a few minutes before 602's first victim, a Junkers Ju 88, hit the water. It was 603's Richard Hillary who gave the world the classic book *The Last Enemy* and men like George Denholm and 'Sheep' Gilroy led the squadron from Hornchurch. Later from Malta with Beaufighters and against the V-1 sites with 'Bombfires' (Spitfire XVIs with 250 lb or 500 lb bombs), the squadron played a vital role. Post-war it was equipped with the Mk 16 and 22 Spitfire, then the Meteor until disbandment in March, 1957.

Next AuxAF unit was 605 (County of Warwick) Sqn, formed on October 5, 1926, at Castle Bromwich with A/Cdr Lord Willoughby de Broke, MC, AFC, one of the many great commanding officers, destined to become senior controller at 11(F)Gp in 1940. After taking their Hurricanes out to the Far East (where many members lost their lives), 605 Sqn re-formed under Wg Cdr Peter Townsend with the Havoc, later with Mosquitoes, to lead the field in intruding over enemy territory. During the night of June 14/15, 1944, F/Lt J. G. Musgrave shot down the first 'Diver' (flying bomb) to fail to an aircraft, and after ending the war in 2 Group, No 4 Sqn, RAF, took over the 605 Sqn Mos-

quitoes. Re-formed in 1946 with Mosquito NF30s, the squadron later converted to Vampires before disbanding at Honiley.

March 17, 1930, was a memorable day in AuxAF history, for three new units were announced. No 604 (County of Middlesex) Sqn formed at Hendon, to become famous pre-war with the Hawker Demon at air displays, and during the war for Wg Cdr John Cunningham's night-fighting prowess, emulated by other officers and NCOs on the Blenheim, Beaufighter and Mosquito. First night-fighters in Normandy, at A.8 Picauville, then at B.51 Lille Vendreville, 604 Squadron had tremendous success against the Luftwaffe, disbanding in April, 1945. Post-war it re-formed at Hendon with the Spitfire LFXVI, before moving to Biggin Hill to re-equip with the Vampire, then the Meteor. A postscript to this is that the late F/L John Quinton, DFC, a 604 Sqn observer-radio operator, joined the RAF post-war when he found no place for navigators in the re-formed squadron. In 1951, given charge of a 16-year-old ATC cadet for a Wellington flight, he gave the boy his own parachute when a mid-air collision caused the deaths of all the aircrew—the cadet alone survived and Quinton's posthumous George Cross wrote an imperishable page in air history.

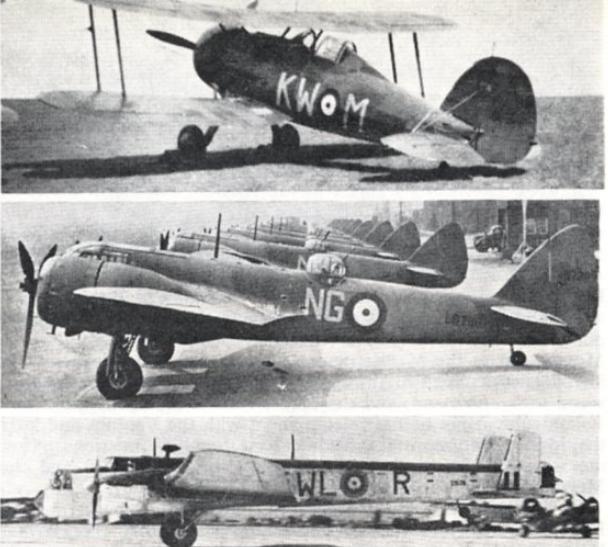
Also formed in 1930 was 607 (County of Durham) Sqn at Usworth. It was with Gladiators that it moved to France in 1939 (with 615 Sqn), then re-equipped with Hurricanes to fight and withdraw to Britain and, on August 15, 1940, went into action again to repulse the Luftwaffe over Tyneside. With the RAF's first Hurribombers, 607 Sqn did well over Europe, then moved to Burma, acquired the Spitfire VIII and, post-war used the Mk 22 Spitfire and then Vampire FB5.

How different was the story for 608 (North Riding) Sqn which formed along with 604 and 607 in 1930, for after the usual Wapiti and Demon periods, it was converted to the Avro Anson to become a General Reconnaissance unit of Coastal Command. In 1940 came a spell with the short-lived Blackburn Botha, then with the Blenheim IV before settling down with the Lockheed Hudson at Wick and Sumburgh. Then 608 went out to the Mediterranean for a great run of U-boat hunting before equipping with Mosquito Mk XXs at Downham Market in No 8 (Pathfinder) Group. Wg Cdr Alabaster, DSO, DFC, later of BOAC Comet fame, commanded the squadron at this time. Re-formed post-war with the Mosquito NF30, the squadron converted via the Harvard T2 to fly Spitfire 22s and finally the Vampire F3 and FB5.

Destined to make a name in a far different role was 609 (West Riding) Sqn, one of three squadrons formed on February 10, 1936. After flying the Avro Tutor and Hawker Hart from Yeadon, the role changed to fighters with the Mk 1 Spitfire and, following a great record in 1940 (when three American pilots flew with the squadron), came the incredible Typhoon era under 'Roly' Beaumont, then with Ingle and Baldwin, with hundreds of ground targets hit and many enemy aircraft destroyed. Post-war at Church Fenton the Mosquito NF30, Spitfire 16 and Meteor F8 equipped 609, one of the units which still has a strong 'old boys' reunion.



Top: All yellow Avro Tutor of 600 Sqn in 1936. Silver cowling. Above: Haste camouflaged Gladiators of 615 Sqn in France in 1939. KW-T, still partly silver, nearest. All serials painted out.



Top to bottom: War years; excellent view for modellers of a 615 Sqn Gladiator in France, serials painted out. Blenheim IF line-up at Northolt, L6798 nearest. Whitley VII, Z9138:WL-R, of 612 Sqn, 1942 (Both Imperial War Museum).

The County of Chester's 610 Sqn, also formed on February 10, 1936, progressed via the Tutor, Hart, Hind, to Spifires, passing its Hurricanes to 605 Sqn before seeing any action on that type. On August 18, 1940, it created a mild stir by putting fifteen Spifires into the air over Dungeness and shooting down ten enemy aircraft and damaging four, without loss. In the Bader Wing and with S/Ldr J. E. 'Johnnie' Johnson as CO, the squadron did well, converting from the Spifire Vb to the Mk XIV and amassing a big tally of 'doodlebugs'. Post-war back at Hooton Park with the Spifire 16 and 22 and Meteor F4 and F8, the squadron gained the coveted Eshera Trophy before disbanding.

Speke is best-known today as Liverpool airport but in 1936 it was No 611 (West Lancs) Sqn which attracted attention with the Hart and Hind and, later, from Biggin Hill, shared that station's thousandth 'kill' on May 15, 1943, when S/Ldr Charles destroyed two Fw 190s and Commandante Mouchotte of 344(FF) Sqn got a third. Claiming to be first fighters over the beaches on D-Day, the Spifire IXs were exchanged for Mustangs in March, 1945. After the war the squadron re-formed with Spifire 14s, then with the Meteor, moving from Speke to Hooton Park before disbandment in 1957.

It was on May 1, 1936, that the Air Ministry decided to drop the Special Reserve scheme and began to embody the few SR squadrons into the Auxiliary Air Force, Nos 501 and 503 changing their style first. The County of Lincoln—503—had been the second SR unit, forming at Waddington in November, 1926, operating 'heavies' like the Hyderabab and Hinai before changing to Wapiti/Wallace and Hart. Unfortunately, Lincolnshire was wanted for the regular squadron expansion and, with a fall-off in part-time pilots, 503 was disbanded and re-formed as 616 at Doncaster. No 501 (County of Gloucester) formed at Filton on June 14, 1929, and had flown the Wapiti, Wallace, Hart and Hind, before getting the Hurricane with which, in France in 1940, then over England and on offensives, it made history. Sgt 'Ginger' Lacey and Sgt Daffron were both awarded the DFM and Bar with 616 Sqn. Until the war ended in Europe the squadron escorted bombers and strafed ground targets, using Spifire Vbs, IXs and, briefly, the Hawker Tempest against the V-1. Post-war it had Spifire 16s and Vampires.

On May 18, 1936, No 504 (County of Nottingham) Sqn (formed as an SR unit on October 14, 1928) joined the AuxAF, having operated the Hawker Horsley, the Wallace and the Hawker Hind, before getting the Hurricane, briefly going to France at the time of Dunkirk, then flying from Hendon and Filton in the summer of 1940 with much success. On the offensive with the Spifire V and IX, then Meteor 3s, the post-war period was served with Mosquito NF30 and Meteor F3, F4 and F8, flying from Hucknall, Syerston and Wymessold.

Continued on next page

A week after 504's transfer to the AuxAF, No 500 (County of Kent) changed over from SR status, after originating at Manston with the Vickers Vimy on March 16, 1931, and later changing to the Hind. Entering Coastal Command's 16 Group with the Avro Anson, the crews did exceptionally well in combat over Dunkirk and a WAAF Auxiliary of 500 Sqn, Cpl Daphne Pearson, gained the George Cross for saving the life of a squadron pilot when his bomb-loaded Anson crashed in flames at Detling. Moving out to the Mediterranean after a spell with Blenheims on intruder work, Wg Cdr (now Air Chief Marshal Sir Denis) Spotswood took command, and the Hudsons sank several U-boats and Italian submarines before re-equipment with the Ventura and later the Martin Baltimore for Middle East bombing missions. After the war, 500 Sqn re-formed with the Mosquito NF30 and the Meteor F3 and F8, flying from West Malling.

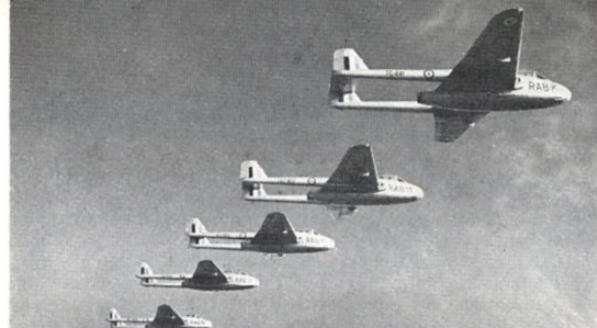
In Scotland, No 612 (County of Aberdeen) Sqn, formed at Dyce on June 1, 1937, with Tutors and Harts, then the Hawker Hector but, on transfer into Coastal Command, the Anson was the initial war equipment for convoy escorts, followed by the Armstrong Whitworth Whitley V, the Whitley GRVIII, then the Wellington GRX and GRXIV. Post-war Spitfire 14s and then the Vampire FB5 equipped the squadron which looks back on a war of vigilant sea-searches, often with little reward.

The County of Glamorgan's squadron, No 614, formed at Cardiff on June 1, 1937, flew the Hind, the Hector, and then the Lysander but in the pre-war and early war days, spent its time providing crews for newly-formed RAF squadrons. It was not until the first 'Thousand Plan' raid in 1942, that its Blenheim Vs were in action and after flying Bisleys out to North Africa for low-level strafes, 614 took over the Halifax BIIIs of 462 (RAAF) Sqn and later operated the Liberator VIIIs from various bases. Post-war 614 Sqn flew Spitfire 22s and Vampire FB5s.

No 615 (County of Surrey) Sqn, which became known as 'Churchill's Own' when the Prime Minister, as Honorary Air Commodore, made his regular calls, started off at Croydon on June 1, 1937, with the Hector, Audax, Gauntlet and Hind and when war came, took their Gladiators (with 607 Sqn) to France, only to receive the Hurricane just before the Nazis invaded and before all its pilots had converted to this type. Fighting courageously, many were lost, but one pilot, F/Lt Hedley Fowler, MC, who was captured, later escaped from Colditz, only to lose his life in England testing an early Typhoon. On offensive sorties the squadron hit shipping in the Channel after playing a gallant part in the Battle of Britain. Later, in Burma, with the Spitfire Vc and VIII, finally with the Thunderbolt FB2, 615 earned high praise from Earl Mountbatten and Air Chief Marshal Sir Keith Park. In post-war years, flying from Kenley, then Biggin Hill, the squadron operated Spitfire 22s and Meteor F8s and achieved the unusual distinction for a fighter squadron of acquiring a Walrus (the machine now at Yeovilton) to give ground-crews air experience and aid recruiting.

Last of the SR squadrons to come into the AuxAF on July 1, 1937, was, strangely, the founder member of all volunteer units, No 502 (County of Ulster) which, from May 15, 1925, had operated such diverse types as the Vickers Vimy, Handley Page Hyderabad and Hinaidi, Wallace, and Hind but, on its move into Coastal Command, operated the Avro Anson Mk 1 before re-equipment with the Whitley. From Chivenor, Devon, the first U-boat victory using air-to-sea radar was scored by 502 and from bases like Brawdy in Wales and Stornoway, Hebrides, flying the Handley Page Halifax, the crews accounted for many enemy ships as well as enemy submarines. Post-war with the Mosquito NF30 at Aldergrove and later with the Spitfire 22 and Vampire FB5, Ulster's weekend airmen carried the 'Red Hand' emblem proudly.

On November 1, 1938, No 616 (South Yorkshire) Sqn formed at Doncaster Airport from a nucleus of 503 Sqn volunteers and after flying the Hind and the Gloster Gauntlet, equipped with the Spitfire and had a run of splendid operations in No 11(F) Group with pilots like 'Cocky' Dundas and 'Buck' Casson. Another notable pilot was Sgt Jim McCairns, who was shot down, only to escape from a German POW Camp and insist on flying Lysanders of the 'Moon' squadrons, to add the DFC and two



Above: Typical post-war scene; Vampire 3s of 501 Sqn in 1950. TG441: RAB-K and TG437: RAB-M are nearest ('Flight' photo).

Bars to his Military Medal. Tragically, he died in a 616 Sqn Mosquito post-war. In 1944, perhaps to the disappointment of many 'regular' RAF units, 616 was selected to be the first jet squadron and, under former 602 Sqn Sgt-Pilot (then Wg Cdr) Andrew McDowell, DSO, AFC, DFM, the Meteor IIIs were tried against the flying bombs and, in 1945, against ground targets in Germany. Post-war the Mosquito NF30 was followed by Meteor F4s and F8s at Finningley.

Despite its number, 613 (City of Manchester) Sqn was the last of the wartime AuxAF squadrons, coming into existence at Ringway on February 1, 1939, and, after training with a mixture of Hinds and Tutors, the squadron was rushed to Odham to take over Hectors and Lysanders and to bomb Calais (with the Hectors) in the dark days of 1940. As part of Army Co-operation Command the squadron received the Tomahawk and later moved into 2 Group to fly the de Havilland Mosquito. Led by Wg Cdr R. N. Bateson, 613's aircraft destroyed incriminating papers at Gestapo HQ in the centre of The Hague, one of the war's finest low-level attacks. Post-war with Spitfires 14, 21 and 22, then with Vampire FB5s, the squadron flew again from Ringway.

So we end this very brief story of the original Auxiliary squadrons. In 1948-49, several Air Observation Post units, equipped with the Auster AOP5 and 6, numbered 661/2/3/4 and 666, became part of the Royal Auxiliary Air Force, No 663 having had existence as a Polish AOP unit in Italy and 664 and 666 as Royal Canadian Air Force AOP units. Between 1950-53, the number 662 Sqn was allotted to Auxiliaries flying the Viking 1 and Valetta C1 and 2 from Blackbushe, mainly crews of Airwork on transport duties for the RAF. All played a useful part but will, I trust, agree that pride of place must go to the pre-war/wartime units, who, as Trenchard forecast, became a 'corps d'elite.'

SPECIMEN AIRCRAFT USED

602: Airco DH9A H144 (first 'Auxiliary' aircraft); Spitfire I R6915; Vampire 3 VT812.
 600: Demon K5700; Blenheim IV P4829; Beaufighter VIF V8388; Mosquito XIX TA448.
 601: DH9A E8627; DH60M K1852; Blenheim 1F K7178; Alacobra I AH582.
 603: Wapiti IIA K1136; Hart I K2996; Spitfire IIA P7350; DH9A J7814; Havoc I BB895; Mosquito VI TA122; Vampire Mk 1 TG349.
 604: DH9A J7319; Blenheim I L6798; Beaufighter 1F R2101; Mosquito XIII MM517.
 607: Demon K5687; Miles Master N7578; Spitfire II P7290; Spitfire F22 PK657.
 608: Wapiti IIA K1324; Mosquito BXK KB212; BXXV KB438; BXVI RV360.
 609: Typhoon 7A R7680; 1B R7646; Oxford 1 MP449; Mosquito NF30 NT283.
 610: Tuto: K3307; Hart K3054; Spitfire Vb X4746; Meteor F4 V187.
 611: Battle II N2101; Spitfire 1 L1036; Mustang IV KM368; Spitfire F22 PK481.
 503: Hinaidi K1066; Hind Trainer L7226; Wapiti Trainer K2244.
 501: Wapiti 2A J9869; Fairey Battle K7571; Hurricane I P3083.
 504: Horsley J8018; Wallace K3907; Spitfire VB EN907; Mosquito T3 HJ977.
 500: Virginia X K2680; Avro 504N K1811; Hart (T) K3751; Baltimore IV FA517.
 612: Wellington VIII HX690; Spitfire LF16 TE395; Vampire FB5 VZ131.
 614: Hector K9762; Tutor K6104; Blenheim V BA734; Liberator BVIII KG945.
 615: Gauntlet K6145; Gladiator K7949; Harvard IIB FX208; Spitfire F21 LA306.
 502: Vimy F9146; Hyderabad J7739; Anson 1 N5049; Whitley V T4219; Halifax II JP328.
 616: Hind K5403; Spitfire VIB BS111; Meteor III EE225; Mosquito NF30 NT271.
 613: Tomahawk IIA AH905; Mustang I AG495; Mosquito FBVI HJ666; Spitfire FR14 NH637.

AEW SKYRAIDER

By popular request the radar picket variant of the Skyraider made by Alan W. Hall

THE Skyraider can claim many distinctions in its long operational career with the US Navy but only a comparative few were to reach British units. Even so it was still able to claim one distinction, that of being the last piston engined aircraft, excluding helicopters, in Royal Navy first line service.

About 50 of these aircraft, the equivalent of the American AD-4W, reached Britain under MDAP arrangements in 1951-52 and were allotted to No 778 Squadron at Culdrose. From this training unit No 849 Squadron was formed with a Headquarters Flight at Culdrose and four operational Flights on board carriers.

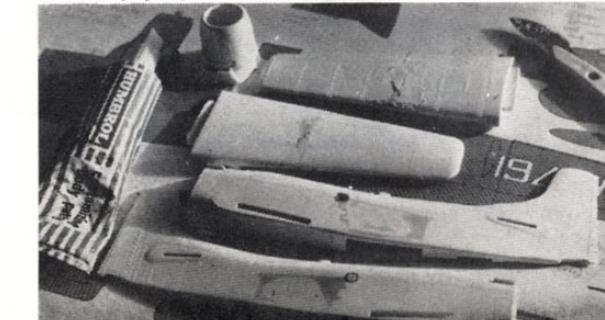
The most distinctive feature of the aircraft was its large ventral radome and its capability of carrying nearly a ton of radar equipment. No British aircraft before the advent of the Gannet had this capability and the Skyraider filled an important gap in British Fleet protection. Used as a radar picket flying up to 50 miles away from its parent carrier, it could transmit radar pictures of enemy surface and air activity far in advance of the Fleet and provide protection from surprise attack.

The aircraft was finally withdrawn in December, 1960, but one, maybe two, aircraft still remain and one of these has been preserved in non-flying condition at Culdrose. This is WT121, the subject of my conversion.

Reference to the RN version of the Skyraider was fairly easy to find, particularly as aviation magazines of the 'fifties carry many pictures of the Skyraider AEW1. One of the best photographs is in Thetford's *Aircraft of the Royal Navy* and this book also contains a three view drawing to supplement that on the next page, plus the aircraft's history.

The actual conversion, although relatively easy, requires a lot of patience due to the numerous additions to the basic kit. It is not a model for beginners but one where several skills, including the possibility of moulding a canopy, are needed. I enjoyed building this model as I am sure many others will who try it. The result provides a considerable change of outline to the Airfix kit and is the sort of conversion that provides plenty of challenge and a chance to add an aircraft to your collection that has not previously been produced.

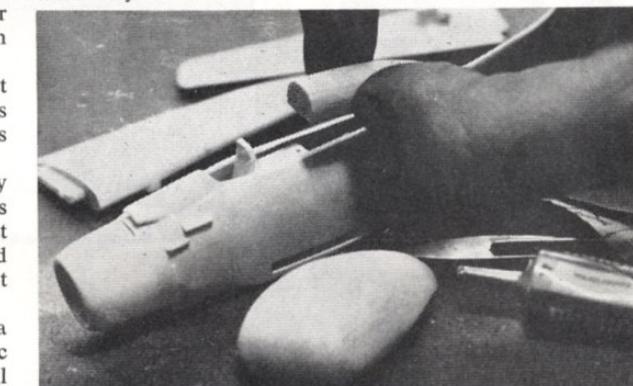
STAGE 1 A fair amount of preparation is needed to the basic fuselage parts before these are glued together. The first job is to glue the speed brakes in the closed position and fill the edges with body putty. I found that these did not fit too well and



The preserved Skyraider at Culdrose which forms the subject of Alan Hall's conversion. Our drawings on the next page show an alternative machine with the same colour scheme.

needed a great deal of rubbing down. Next drill the holes for the entrance door windows. These appear on the top left hand corner of the speed brake positions and the holes were made by drilling and filing. The transparency, which it should be noted is slightly bulged, is made from scrap clear plastic sprue. This was not too difficult to make but needed careful fitting before being acceptable.

STAGE 2 The fuselage halves with cockpit detail, tail wheel, and tail hook added, are now glued together and set aside to dry. At about this time the wings can also be cemented and, if the non-folded position is desired, preparation will have to be made to fill the gaps and clean up the unevenness of the wing surface. From a close inspection of the aircraft at Culdrose, I found that the Skyraider had flush riveting which means a lot of patient rubbing to remove the rivets on the kit. Rivet removal will have to be done in any case on the wings as the filling and sanding of the wing joints will leave no alternative. Watch the trailing edge alignment. It is difficult to see this slight fault in the kit when sticking the wings together but if it is not detected now a distinct kink will appear later when the rubbing down gets under way.



Above: Stage 3, showing the radome ready for fixing and the canopy fairing being cemented in place. Foot of page: Stage 1, showing speed brakes filled in and holes drilled for door transparencies.

STAGE 3 After rubbing down the joints on the fuselage, the wooden parts can be added. To make the longer cockpit fairing cut away the fuselage on a level with the existing front end of the cockpit for a length of 1½ inches, using a fretsaw. Then file away the excess plastic to make the cockpit area level. A balsa plug is then added, stuck in place, allowed to dry and then roughly shaped according to the plan. For the radome I took a much larger piece of balsa and again roughly carved the shape I needed.

It should be noted that the wings are not stuck in position until all of the work on the fuselage is finished.

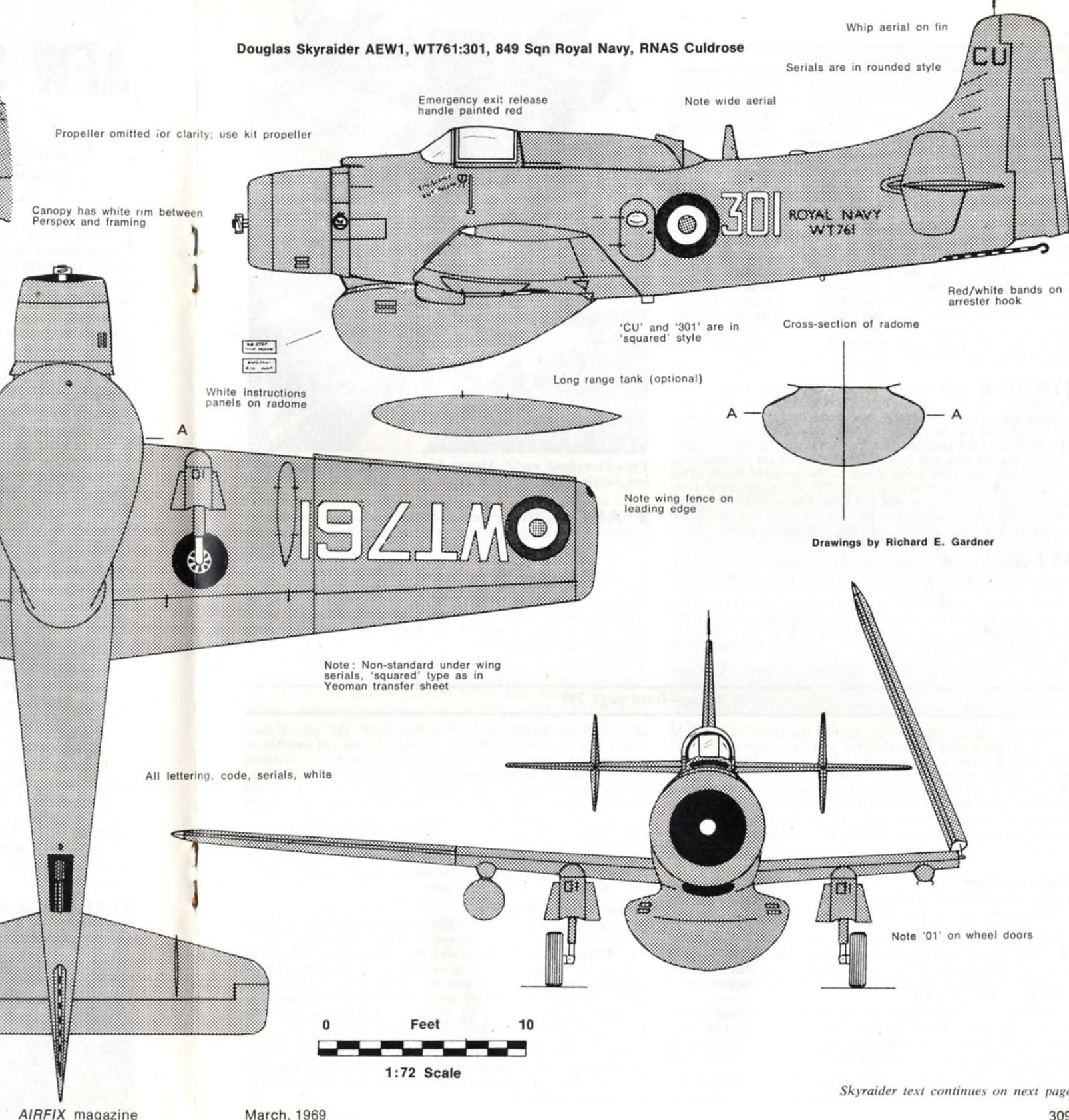
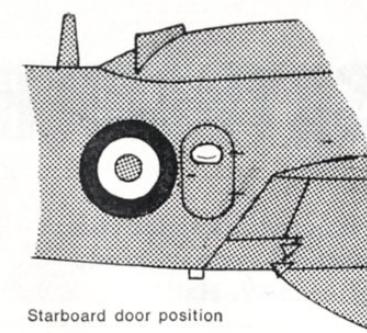
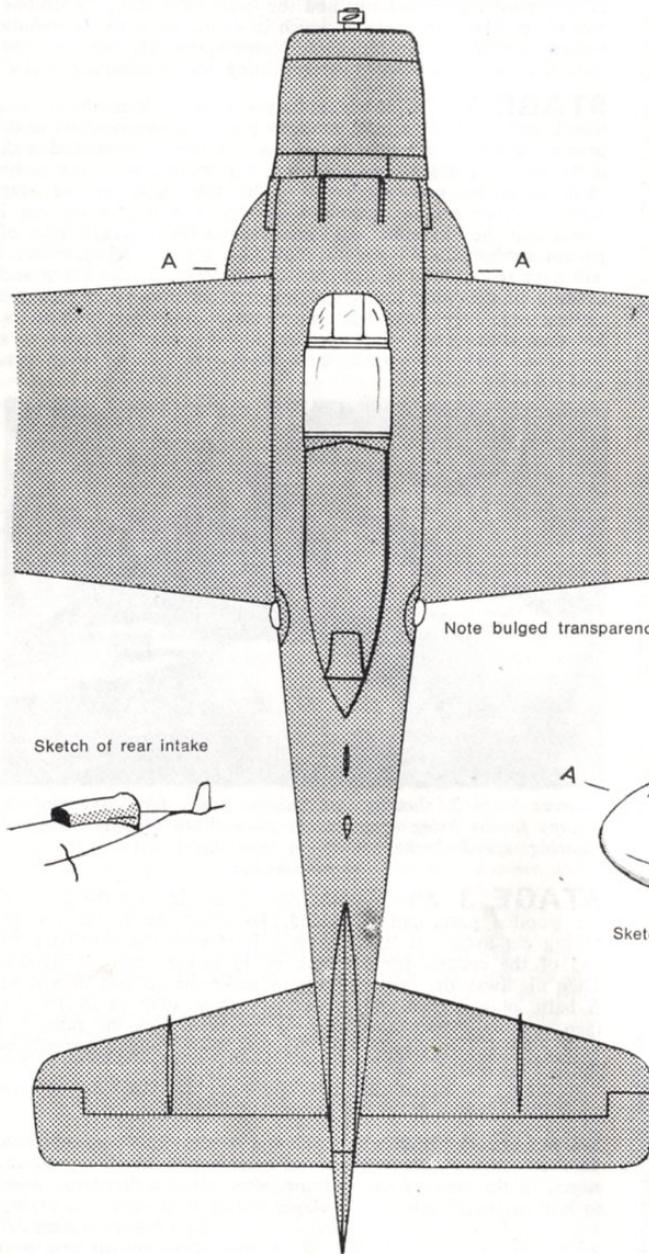
STAGE 4 Both the top and under fuselage additions were coated with clear dope and talcum powder filler and the edges, in the case of the radome, were filled with plastic wood to fair the bulge into the fuselage. Whilst this work was drying,

Continued on page 310
 Scale drawings on next page

PAINTING AND MARKINGS

To achieve the correct shade of 'midnight blue' I used the Humbrol paint sold under this name with one part of matt black for every four of blue. By further adding a small amount of matting varnish the correct semi-gloss finish overall colour was ready for application.

A large mixture of transfers was needed to complete the model. Individuals will find their own salvation in this respect from spare transfers from other kits, but as a guide I used roundels from the Frog Sea Fury, $\frac{1}{8}$ inch Yeoman letters and numerals for the underwing serial and side code, Letraset sheet 208 for the white 'CU' on the fin and the words 'Royal Navy' from the Airfix Hellcat transfers. The small letters of the fuselage serial were hand painted.



Skyraider—continued

the engine was assembled and painted ready for positioning after the polishing of the wooden parts was complete. This latter took some time and it must be emphasised that to get a good finish care must be taken to polish the wood to give the same smooth finish as the rest of the surrounding plastic. In the case of the radome, I even gave it a final rub with a metal polish to ensure that the surface was completely smooth. If you find any flaws the first time, be prepared to give the balsa a further coating (and subsequent rub down) with the dope/talcum filler.

STAGE 5 When the engine, cowling and wings have been assembled, turn your attention to the tail unit. The auxiliary fins on the tailplane are made from plastic card, cut out and shaped before application. At the point where the tailplane leading edge is connected to the sprue, a saw cut is made to the line of the elevators. I used a fretsaw for this and found that the thickness of the saw cut was just sufficient to take the fins. A few deft cuts with a sharp knife, followed by a little sandpapering, will do the trick if the fitting is tight. The completed tailplane is then added to the fuselage.

STAGE 6 Now go back to the cockpit area. First, a large air intake on the rear of this caused me a great deal of trouble. It could not be made with the rest of the cockpit and I eventually found that the best way to tackle this problem was to cut into the rear of the completed cockpit with a sharp knife, remove a wedge shaped area and insert a small plug larger than the size of the intake and then carve down to the required shape. This particular section is perhaps the most difficult in the conversion. It needs great care and careful handling. One slightly too heavy rub with the file or sandpaper will ruin the work and the whole cockpit area will have to be removed and started again.

STAGE 7 The canopy is next to be considered. Here there are two alternatives—you can either mould a complete new canopy or use existing parts. I found that by cutting off the front of the existing canopy and using part of the canopy from an Airfix Gnat trainer that I could achieve an exact copy of the plan. The choice is up to you. The Gnat canopy is possibly the easiest way out of the problem but it does mean buying another kit.

New Books—from page 297

and SP guns on half-track chassis used by the Germans in World War 2. It has a very comprehensive coverage ranging from the little NSU Kettenrad motor-cycle half-track and its variants to the big 18 ton recovery vehicles. There are also a few captured French types used by the Germans. There is a total of 81 pictures, plus data and brief notes on development and employment. Altogether it is a most handy little reference book at a reasonable price. Armoured versions of German half-tracks will be covered in a later volume.

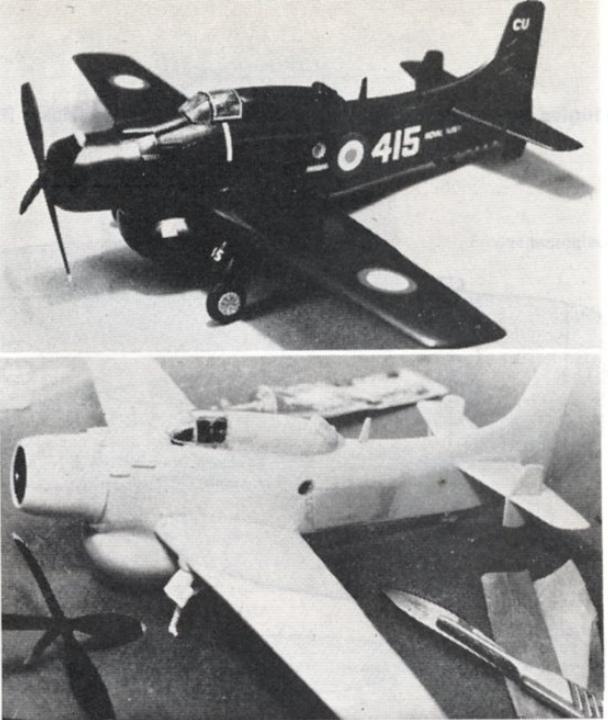
Vickers story

VICKERS AIRCRAFT SINCE 1908, by C. F. Andrews. Published by Putnam and Co Ltd, 9 Bow Street, Covent Garden, London WC2. Price 105s.

THIS book describes in great detail the work of one of the finest aircraft manufacturers in the world. It has been written by a man who has had close associations with the aircraft industry all of his life and indeed started his career as an apprentice at RAE Farnborough in 1916.

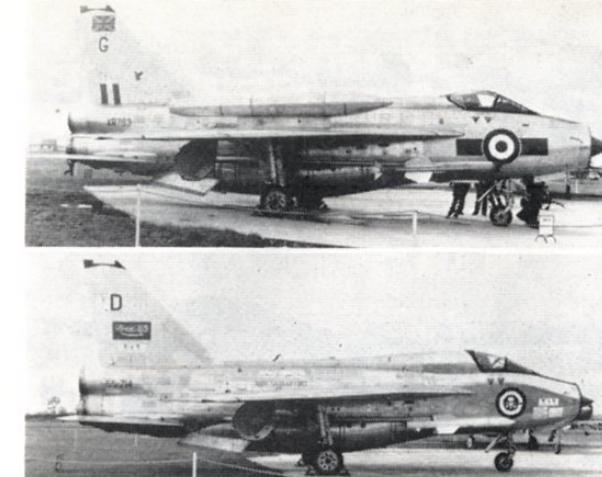
Much of Vickers' development as one of the leading manufacturers in Great Britain has not been available in publicised form until Mr Andrews conducted his research work. Like so many other organisations, early records were lost or disposed of on security grounds.

Famous aircraft such as the Gunbus, Vimy, during World War 1, the Vernon, Victoria and Valentia transports between the



Top: Completed model. Above: Final stages of construction with last details added including auxiliary tail fins from plastic card.

STAGE 8 Having completed the major alterations, the details are now left for completion. Small triangles of plastic card have to be added under the wing as flap guides. A large aerial behind the cockpit, also from plastic card, is added and two footguides are made on the fuselage below the entrance door from stretched sprue. Bomb racks or long-range fuel tank attachments are made from balsa for fitting under the wings close to the undercarriage wells. Finally, the undercarriage itself is added after you've painted the wheels black and the hubs silver separately before attachment.



Top: Lightning F6 XR763 of 23 Sqn with the fin tip Union Jack. Above: A Lightning T55 of the Royal Saudi Air Force.

Colours 1968

A SURPRISING thing about aircraft markings is how, irrespective of cost and complication, they never remain in vogue for long. Little wonder, then, that they come to interest so many people. In no mean way the history of military aircraft markings is the story of the tactics of air warfare. They reflect policy decisions and are more than mere decoration. Changes are often radical, frequently taking months to fully implement. Laid down schemes often become modified by official order or initiative. The pattern for 1968 has shown these characteristics.

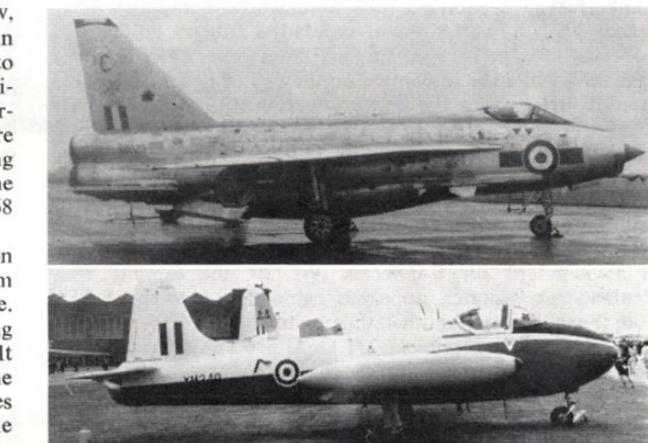
In 1966 we saw the introduction of a subtle modification to some RAF aircraft which hitherto had an aluminium finish, the application of Light Grey BS381-63 in its place. Last year it was to be seen on many aircraft including Hunters, Jet Provosts, Chipmunks, to mention but a few. It was partly the standard finish for long haul transports by the summer of 1967. They had their mainplanes, lower fuselages and engine nacelles all painted in the new finish. To make this durable, polyurethane Grey (BS2660-9-093 (E)) has been latterly applied, proven to have very strong lengthy 'life' irrespective of climatic variations of utmost severity. Application of such paintwork demands special expensive facilities and calls for specialised techniques whereby the aircraft are first skilfully cleaned then 'baked' after paint application. In the case of large transports like the Belfast, this calls for considerable preparation and organisation. The first of these huge machines to be specially treated after modification to the latest 'fast back' configuration was shown at Abingdon in June. Roundels on the Belfast still include Post Office Red (BS381-538) and Roundel Blue for which there is no BS equivalent shade. Yellow which decorates the walk ways on transport aircraft is in shade BS381-356.

Tactical transports in 1968 could be seen wearing Light Stone BS381C-361 and Dark Earth BS381C-350 with Night BS381C-642 on their under surfaces. Apart from white fuselage numbers and 'RAF Air Support Command' lettering, these machines have under-wing serials in Grey BS381C 631. Such basic colours apply to the Andover and Hercules. Although the Beverleys have been all but retired, they can still be seen gracing the MUs in the winter of their lives. Four which I looked at in May portrayed an assortment of finishes. XM103:U had two-tone brown and black finish with grey under-wing serials and Type B roundel under the



starboard wing tip. It had a dark grey U on the nose with a black scorpion, and a black fin diamond. Fuselage serial and ROYAL AIR FORCE MIDDLE EAST were applied in white. XM111:D had a similar basic scheme but had a black heart on the fin, scorpion on the nose, and D in medium grey. XL131:L wore the more usual white/aluminium finish, pale blue spinners, AIR SUPPORT COMMAND lettering and 47 Squadron's tail motif. XH122 camouflaged had a black fin diamond and a scorpion on the nose.

Now only a memory are silver C-130Ks. When these arrived in Britain they had natural finish. Type D roundels on the fuselage and usually below and above the wings, as well as RAF fin stripes. The last arrived on June 1. Pem-



Top: Lightning 6 XS923 of No 5 Sqn with dayglo red Maltese Cross on her fin. Above: Jet Provost XM349 exhibits the new scheme of trainer markings, but for her grey tip tanks.

brokes and Devons, long silver and white, have now conformed to the grey/white scheme with Roundel Blue stripe and black numbers and lettering. Heron XM295, subject of the Airfix kit, was to be seen at Abingdon in these colours during June.

It is hard to appreciate that the Hunters of 1 and 54 Squadrons are part of what is essentially a transport organisation. Like those of 229 OCU, which trains Hunter pilots, their machines have glossy Dark Green and Dark Sea Grey finish with Light Grey under surfaces. XG225 with 58 in black on a yellow fin disc had these colours. 229's Hunter T7s are Light Grey overall with red strip dayglo on the nose, rear fuselage and chordwise in the form of a 'trainer band' of years gone by.

An interesting feature on most strike aircraft is the extension of the upper camouflage for a short way on to the under surfaces of the wing leading edge. This could be seen at Alconbury in May on Victor SR2 XM718. Its Dark Grey and Dark Green/high gloss white finish had the upper sur-

Continued on next page

Profile—continued

face colours extending for about one foot under the root of the leading edge, tapering to about six inches at the tip. When I visited Wittering to cover part of the 50th RAF Anniversary fly-past in June, I noticed that the Victor 2s based there had this feature, also a yellow lion rampant on the fin. Presumably the extension of the camouflage is to render the aircraft less conspicuous when low flying. Vulcans also have this paint work. And, whilst writing of the latter, it seems pertinent to point out that it is unlikely that the Mk 1A will be seen flying for much longer. All the Vulcans on public display in 1968 were Mk 2s in grey-green-white finish. One V-bomber worthy of particular note was the Victor 1A XH592 seen at Coltishall with TTF on its fin in red outlined white.

Whereas the V-bombers generally keep to one paint scheme, this is far from true of the Canberras still in service in some numbers. A rather unexpected feature of last year's Armed Forces Day shows was the appearance of a PR3 from 231 OCU Bassingbourn wearing Dark Green-Dark Sea Grey/Light Grey glossy paint work. For nearly sixteen years, Canberras have equipped this unit, whose aeroplanes have reflected all the variations in standard Canberra colours yet borne little in respect of unit markings other than the tiger face on a white shield painted on the fins of its PR3s. WE135 seen at the shows is the first production PR3, exceeded only in age by the prototype, VX181, in blue and yellow finish and still flying from Boscombe Down; '135 rather surprisingly has the crest of 231 OCU on a white shield applied to both sides of the nose. The tiger motif is retained on the tail. An 8 inch fuselage serial is carried and the 4 foot high under wing serials are in 6 inch strokes. Camouflage pattern is as standard for Canberras. WE139, the famous New Zealand race winner, appeared camouflaged at the RAF's 50th Year display. Another thus painted is WE166. Some of the Canberras in service at 231 OCU are Light Grey overall and have dayglo markings on the nose, rear fuselage sides and on the wings. Fuselage serials are usually of the large type. A grey B2 is WJ637.

Another camouflaged Canberra on public display was PR7 WT512 of No 58 Squadron. It looked very smart in glossy grey and green with Light Grey under surfaces. Its small black serial was repeated on the nosewheel door. Engine nozzles were red, and upper camouflage extended six inches on to the lower wing surfaces. On its fin it had a grey owl. Not all of the front-line Canberras yet have grey under surfaces, though, as evidenced by B(I)8 XM278 seen at Coltishall in Dark Green-Dark Grey/Aluminium finish. It had a large black O on the fin and 14 Squadron's markings flanking the squadron crest on the nose. A belly gun pack was fitted. Some PR7s, incidentally, still have white serials.

Lightnings on public display in 1968 showed fairly consistent markings. XS937:C, a Mk 6 of 23 Sqn, had 23's red and black crest on a white fin disc. Red and blue markings flanked the nose roundels. Two of 23's Lightnings flew to North America in the summer, and for the visit Union Jacks were painted on each side of the fin tip. G:XR763 had these markings. Rain prevented the annual fighter fly-past from Wattisham to mark the Queen's Birthday but Lightnings due to take part were ready in case a clearance came. A walk along the lines showed that 11 Sqn was included, its machines having a yellow and black nose marking. On the tails were two falcons on a white disc. 5 Sqn also had a detachment



Top: 12663, a TF-104G of the RCAF. **Centre:** Miss Oklahoma City, a C-97 assigned to Project Talking Bird. Note the tail dayglo band and nose dayglo panel, trimmed in dark blue. **Above:** Heron XM295 in grey-white-blue finish.

ready for the fly-past. These bore a dayglo red Maltese Cross on the fin, a memento from a Malta detachment. 226 OCU's machines bear markings as before, all having their 'last three' in black at the fin tip and the emblem of 137 Sqn on the fin.

For the Battle of Britain display at Coltishall, a Lightning T55 was displayed, for the Royal Saudi Air Force has been learning how to use its Lightnings at this station. 55-714 was here in natural finish. It had a black D on the fin and black fuselage number 55-714. Beneath the D was a green panel with white inscription and below this a white panel bearing the Arabic numerals for 212. Cockpit framing was black.

The assortment of markings carried by trainers has already been mentioned. They range from Light Grey of Hastings T5s like TG505, which has red strip dayglo, to Chipmunks like silver WP912 with black 8 on the nose and fin tip. WK591:9 is all grey and like its predecessor here has a light blue fuselage band bordered in dark blue signifying Cranwell as its home station, which is also proclaimed by the crest on the band. A Cranwell Varsity on show in September was WL689:N-E, Light Grey with red strip dayglo, blue fuselage band, and light blue spinners. There are still, however, many silver trainers about, like Jet Provost T4 XP641, which has red strip dayglo. This machine has a yellow stripe across the fin with black 34 on it. The nose sides carry 34 in black, repeated on the front of the nose and inside the flaps. Above the yellow fin flash, this machine has worn a small dayglo pelican shape.

RAF helicopters have colours mainly as before. Wessex HC2s in their grey and green camouflage have Light Grey under surfaces and white lettering. 18 Sqn has come into line with the Hercules and Andover fleet by having its machines painted green and grey with Night under sides, one such being on public show in September. A few Whirlwinds have the grey-green finish, but air rescue machines are still yellow overall with black trim, as for example XP398, a Mk 10. The latest Army helicopter markings comprise Dark Earth and Dark Green overall colouring. ARMY is applied in black appropriately, and serials are black too. In the case of



Drawings by
A. M. Alderson

the Sioux the side roundel has an outside diameter of six inches. Such small roundels are also a feature of the Army Beavers. On XV272 they were 18 inches in diameter on the fuselage side, and the serial and ARMY was applied in white. Absence of upper wing roundels has long been an oddity of some Beavers. Under the wings these aircraft have Type D roundels and white serials.

As the number of aircraft in service contracts so the oddities must become fewer. Nevertheless, the Ministry of Technology establishments still maintain a number of unusually painted aircraft and quite a number had public airshows in 1968. Shackleton 3 WR972 was one, wearing a white fuselage top with light blue lower half and dark blue cheat line. ROYAL AIRCRAFT ESTABLISHMENT was on the fuselage in black, fins and rudders were roundel blue, and the black nacelles had corresponding black zones chordwise over the mainplanes.

A number of unusually painted aircraft fly from the A & AEE, Boscombe Down, including a pale green and pale blue Scout XP165 used by ETPS, an all-yellow Meteor NF14, WS838, an ETPS Chipmunk WB549 in silver with yellow bands trimmed in black, three yellow Harvards FT314, FT375 and KF183, and also white Canberras like WK164

Above: Wessex XV722 of 18 Squadron wearing the markings in which it appeared at Finningley on September 14, 1968. Note the small 'B' on the starboard side, from which quarter the usual entry step was missing. Rotor tips were yellow. Tail markings for 18 Squadron (far left) and 72 Squadron (right) are shown in the form in which they were worn in 1968.

which have pale blue cheat lines and tip tanks and the A & AEE crest on the tail. One of their most unusual Canberras is the glossy black Mk 2 hybrid, WV787, which has the canopy of a Mk 8 and a pointed fawn nose radome. At the rear of its fuselage it has a special water spray device fed from belly tanks. It was used for de-icing experiments.

Various foreign aircraft seen in Britain in 1968 are certainly worthy of mention. Danish Air Force F-104Gs had natural finish fuselages and white wings. Noses and tails carried black numbering, eg. R-647/16647 respectively. A two-seater TF-104G was RT-681/12681. A number of F-104Gs of the RCAF seen at Wethersfield were similarly finished in natural metal and white. All had blue-white-red roundels but the maple leaf superimposed varied in size. Some of the RCAF Starfighters seen in late in France have red-white-red roundels matching their tail striping.

Most of the RF-4Cs at Alconbury in May were camouflaged. Previously they had been seen in two shades of grey.

Continued on next page

Profile—continued

The new scheme when introduced showed the Phantoms richly decorated in two greens and brown with almost white undersides. The richer tones of these F-4s seem to have survived better than those in the paintwork applied by McDonnell. The newer paint was applied in Spain. An interesting feature of RF-4Cs of the 32nd Tac Recon Sqn was that they had white and blue nose decorations and names, quite out of keeping with other USAF fighters in Britain. Camouflaged machine 41033 was called WITCH CRAFT. Nose radomes on some machines remained white, but most were black. Another interesting point of detail on some of the American aircraft seen in Britain is the present curious manner of applying maker-type-block designations. One noted was 'MC-RF-101C-50-MC 56-198', another was CO-TF-102A 56-2331 of the 525th Sqn. 'CO-F-102A Block No 70 56-1236' had only one tone of green in its camouflage. All lettering on this was in dark blue.

Possibly the most exotic machine at any of the year's shows was C-97-45-BO (ex C-97E) 51-224/0-10224 shown at Upper Heyford. Finished white and natural metal, it had blue grey fuselage under surfaces and similar colour wing under surfaces less a 2 foot wide leading edge strip of bare metal. Surprisingly the machine was open for full public viewing. A board at its forward entrance read 'Special Project C-97 Communications Facility, Talking Bird, 137th Military Airlift Wing, Oklahoma ANG.' The internal layout was highly specialised with six positions for radio/radar operators amidships. A large 'state board' faced one of them. Another notice proclaimed the machine to be 'Pentagon Command Post 88B'. Walking round the aircraft one could see that all external numbering and lettering was in dark blue. A silver star decorated the medium blue nosewheel door, and the American flag graced the sides of the fin.

Alongside this machine was an almost equally fascinating KC-135A-BN-33 58-004A/80004 light grey overall with dark blue trim. It had the standard SAC blue band forward of the wing and 0004 on the nose. The aircraft hailed from the 917th Sqn, 450th Bomb Wing, based at Minot, North Dakota, and was in service in Spain as an in-flight refueller for TAC fighters. Undoubtedly it had a fascinating history, for on the port side of its nose it had five rows each of three groups of five symbols indicating 'Yellow Tiger' missions symbolised by a Y with T superimposed. Ahead of these were 43 bracket-like symbols grouped in 8s representing missions flown in the Far East. The purpose of these journeys was left to public imagination. Sides of the main cabin were lined by



Top: Victor B2 XM717 climbs away from Wittering and shows the slight extension of camouflage under the wing and tail surfaces. **Centre:** Canberra PR3 WE135 of No 231 OCU in green-grey-light grey finish. **Above:** Chipmunk WP964 photographed at Kidlington on October 4, 1968. Its unusual camouflage was glossy dark green-dark earth-black. Note the absence of wing roundels and fin stripe. Use of a Type C roundel is also most interesting (Photo by T. C. Fox).

red webbing seats. Full FR gear was carried.

But of all the markings to be seen in 1968 surely none is so striking in its styling as that now being introduced quite widely on the Jet Provosts. The polyurethane paintwork basically consists of white fuselage decking, fin and rudder. Lower half of the fuselage, tip tanks and the top side of the tailplane are Post Office Red, and a narrow red band is painted along the leading edge of the tailplane under surfaces. Wings and elevators and part of the under surfaces of the tailplane are a light shade of grey. Serials, in black, are sited and sized as before, and fuselage roundels have their lower half outlined white. A white stripe sweeps forward from the canopy beneath the black anti-dazzle panel. XM459 of 3 FTS Leeming is one machine in the new colours. It carries a black 21 amidships and this number above the fin stripe. 3 FTS badge is applied to either side of the nose. A Jet Provost was exhibited at the Abingdon Review wearing the new colour scheme, although it did not have red tip tanks. A most interesting point is the complete absence of dayglo, thought to be due to this inducing accidents rather than reducing them.

Michael J. F. Bowyer

EVERYTHING FOR PLASTIC MODELLERS

OUR OWN! 1/72 German W.W.I Transfers 1/6 sheet

NEW Full range of ALMARK Transfers 3/- sheet

NEW Tamiya 1/100 scale Aircraft Kits 5/11

NEW FROG KITS: Bristol Blenheim 1/72—6/-;

Renzan Rita—22/-

ALL TAMIYA, RIKO, MONOGRAHAM, AIRFIX,

REVELL, AURORA Kits Stocked

NEW RIKO KIT S.S. STRATHARDLE 35/-

Please add postage to all orders.

CATALOGUES: Airfix 2/3, Revell 2/6, Aurora 3/-, Riko 3/-.
All post free.

JONES BROS. OF CHISWICK
56 Turnham Green Terrace, Chiswick, W.4
Tel. 01-994 0858
Est. 1911

DE-FREY DECALS

A NEW SHEET IN OUR WORLD WAR TWO RANGE Sheet 3 gives limitless variations of coding and serials for heavy bombers of the R.A.F., such as Lancasters and Halifaxes. Serials are now available for the first time, giving many accurate possibilities. The dull red has been accurately matched and the finish is matt. Price 4/- inclusive.

Sheet 2, depicting D-Day Invasion Stripes, Royal Navy lettering and solid colour blocks has been reprinted and is again available at 5/- inclusive.

DE-FREY DECALS

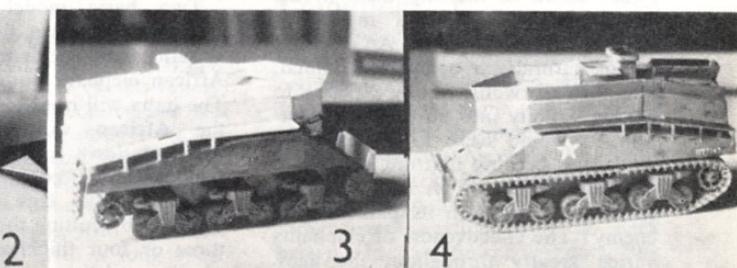
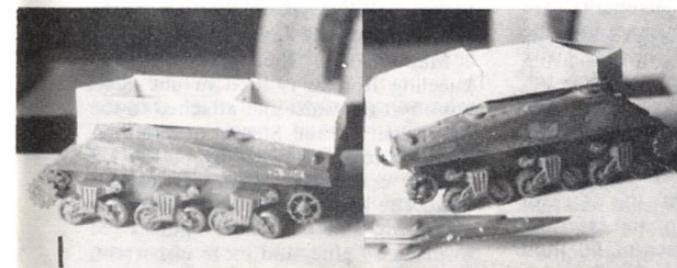
248 HIGH ROAD, LEYTON, LONDON, E.10



Above: The pilot model Sherman BARV which lacked a fully built-up superstructure at the rear and had narrower central intake than later vehicles. This picture makes a good guide for detailing the model. **Right:** Full-size drawings (top and side) for Sherman BARV superstructure and hull top. Other parts are (1) superstructure rear (half only, cut two), (2) support for front fender (two needed), straight edge forward, (3) rear section of engine intake.

SHERMAN BARV

ONE of the oddest of all special purpose variants of the M4 Sherman in British service was the BARV (Beach Armoured Recovery Vehicle), which was produced specially for use in the Normandy landings in 1944 and remained in British service until replaced by the Centurion BARV (described in model form in our November, 1964, issue) in the early 'sixties. Post-war the Sherman BARV was called the Sea Lion, and its purpose, of course, was



to recover vehicles damaged or flooded out during amphibious operations. A secondary duty was assisting beached landing craft to get clear of the beach, achieved by giving them a shove with the special fender mounted on the vehicle's front. To work on the beaches a deep wading ability was needed, hence the boat-like superstructure and trunking which enabled the vehicle to operate in water up to the height of the coaming.

In model form this conversion is quite straightforward. All you need is a quantity of plastic card and the patience and ability to cut out the parts and cement them together. There's no catch other than that. Basis is the Airfix Sherman kit; I used an old Sherman model I had made years ago and simply discarded the turret, but if you are starting with a kit, first of all build up the chassis exactly as in the instruction sheet, but omit the driver's and co-driver's hatches, and cut off the hull machine gun to leave only a stub. This is cemented inside its locating slot to seal off the aperture as seen clearly in the heading picture. Then cement suitably sized rectangles of plastic card over the driver's and co-driver's hatchways.

Now refer to the drawing and the model pictures:

Picture 1: The basic superstructure parts, ie, the sides and front faces are all measured from the drawings and cut out individually from 20 or 30 thou plastic card and the first section to be added to the hull top is the central rectangular part.

Use the outer edges of the driver's hatchways as a guide for lining up. You have to cut slots in the rectangles to fit over the

coaming moulded on the hull top and this is easily seen by holding the sides in position and marking the necessary cut lines with a pencil. After a 'dry run', cement the sides in place and complete the 'box' by adding front and rear transverse rectangles of card as clearly seen in the picture. These help support the top later and give rigidity to the structure.

Next add the sloping rear sides, then the back faces. Finally, add the front faces, which are more difficult since a cut-away must be included to clear the drivers' hatchways. I found it best to cut these front faces slightly over size and then trim them down to get a precise fit.

Picture 2: Construction now proceeds with the addition of the superstructure roof, which is the most complicated part. Add the central part first, cutting it as two separate sides. Note that the front edge of the central part is angled back to take the front roof section. The latter is cut as two separate triangles of card, right and left, and in the picture one side of the front roof is seen cut out ready to be cemented while the other (left) side is already in place. Once again, I cut these slightly overlarge and then trimmed them down by 'trial and error' to get a good fit.

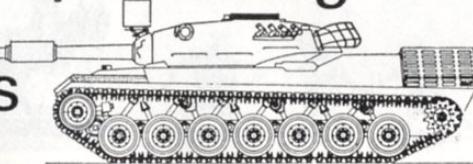
This is commended also for the rear roof section, especially since the rear edges have to be angled slightly to clear the rear face. The join is quite prominent at this stage between the central roof section and the rear roof, due to the angle at the break. This is not serious, however, because it is concealed by

Continued on page 317

Military Modelling

by

Chris
Ellis



ROMAN FRIENDS AND FOES

BY BARRY O'BRIEN



MOST people think of Hannibal when war elephants are mentioned, but the elephant had been in use as a weapon of war long before him, and was to be used with more or less success for a long time afterwards. The original users of elephants were, as one would expect, the Indians, and the western world first came into contact with them when Alexander the Great and his armies penetrated into India. His successors used them to a great extent, and the Carthaginians employed a form of African elephant, smaller and much more amenable than the big African elephant we know today, who is definitely too 'touchy' an animal to be used in this way.

The Romans made little use of elephants, and once they got over the initial shock of meeting them in the field, devised ways and means of countering them in battle. An elephant is not naturally a belligerent animal, and normally would not be expected to charge happily into an enemy formation. It would have to be carefully guided in, because if it did get out of control it could do as much damage to its own troops in its panic as the enemy! The effectiveness of elephants varied greatly throughout the ages. They were most effective when being met for the first time, or when up against undisciplined levies, but cool, professional troops, and there were more of these in the ancient world than one thinks, could use javelins to actually attack and discourage the beast, and archers could pick off the crew. Most horses did not like elephants, and there were occasions when numbers of them were used simply in a holding capacity, strung out on a flank making an impenetrable barrier through which the enemy horses simply would refuse to pass. Any rider who tried to make his horse pass the line would be liable to be thrown while his horse would bolt. This could be overcome by training and getting the horses used to being near elephants, but all commanders did not have the time, or the foresight, to do this.

For all this, the elephant was an

Part 6: War Elephants

expensive weapon, costing a lot to maintain and equip, and subject to a variety of ailments. It had some great successes, but equally had its failures, or rather occasions when it appeared to have no effect at all on the course of the battle. Having said all this, there is no doubt that a fully equipped war elephant, probably partly armoured, must have been a magnificent and inspiring, or ominous and terrifying sight, depending on which side you were on, and no ancient wargame arsenal should be without at least one, even if it is only used as a command post for an Asiatic army.

Model elephants

Two basic model elephants are suitable for OO size figures, either the Britains baby elephant, or the Airfix African elephant out of the Zoo set. The baby will need tusks added, while the African will need his tusks trimmed down a little, and his ears clipped. Some people I know have lengthened the legs of the African elephant by cutting them and inserting three or four thicknesses of 60 thou plastic card (see sketch 2), the idea being to produce an animal of slightly



Numerous variations on the war elephant idea are possible and this picture by reader K. H. Hamilton-Smith shows one of his models using the Airfix Zoo Elephant as supplied. Note the very effective strapping holding the howdah in place. Quivers in this case are attached to the sides.

more imposing appearance, and less tubby look than the figure as it comes from the box. This also makes it taller than the Britains baby elephant, so that the larger type can represent the Indian elephant, and the smaller the North African type (now extinct) of that time. To get an idea of scale size, a full-grown elephant could vary from 9 to 11 feet high at the shoulder.

Two elephants are shown, the smaller one is completed and painted, and has been given half armour in front, while the larger one is shown with the bits and pieces omitted, to show the 'saddle' arrangement.

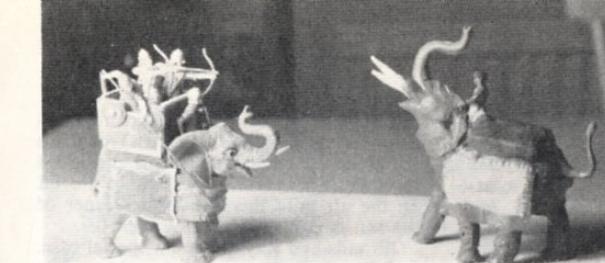
Construction should follow a certain pattern, in order to avoid making an awkward job of something which could have been done more easily at an earlier stage. The first thing to do with either elephant is to add tusks to the little chap, or cut down those of the big fellow. The latter is easily done with a sharp knife, and he is shown in the photograph with the tusks as they should be. Tusks on the other one are made of wire about 16 gauge, 15 mm long, filed down at one end and suitably curved. About 4 mm is inserted in holes drilled where the baby tusks are showing, and held by glue.

Mahouts are the next job. The kneeling Roman is used in one case, cut off at the waist and attached to the lower half of the Sheriff of Nottingham, no less! In fact, any of the US cavalry or similar lower parts can be used. The legs must be bent backwards as shown, and the whole figure fixed in place by glue, and more important, a beheaded pin which is first pressed into the elephant's neck, and then used as a centre post to hold together the parts of the mahout. Sketch 1 shows this, and also the circular shield 8 or 9 mm diameter fixed in place of the Roman one.

The mahout for the larger elephant is made from the lower half of a Red Indian rider (the bare-legged one) and the top half from the native in the Tarzan set. Assembly follows the same lines as for the other mahout.

The howdah is made in this case from plastic sheet; 40 or 60 thou can be used, and is 25 mm by 20 mm, and 16 mm deep at the sides. The greatest width of the howdah is across the elephant, and to support the overhang of this a heavily padded and reinforced 'saddle' was strapped over the elephant's back, and the howdah settled on this, and in turn was held by heavy straps attached to the main strapping.

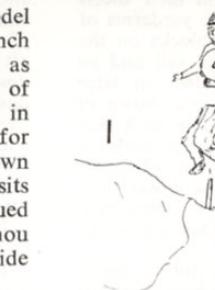
AIRFIX magazine



This saddle is represented in the model by a pad of Plasticine about $\frac{1}{8}$ inch thick, and covering the same area as the howdah. The two longer sides of the howdah have curved cut-outs in the lower edges, and when ready for assembly, the howdah is pressed down on to the Plasticine so that it sits square on the beast, and is then glued into position. Floor pieces of 20 thou plastic sheet are then cut to fit inside the howdah.

The howdah is completed by glueing circular shields of 6-8 mm diameter to the sides as shown—the boss of these shields is the head of a small pin which is glued into a hole drilled through both shield and side of howdah after the former has been fixed in position. Cases for javelins are shown attached to the rear of the howdah. These are formed simply from 10 mm plastic sheet about 12 mm long and half as wide. Alternatively, a bag can be made by wrapping 10 thou sheet round a $\frac{1}{16}$ inch dowel, glueing and binding with thin thread and hanging on to the howdah at the sides or rear. These bags should be closed at the lower end by a plug of Plasticine coated with banana oil.

Finally, the elephant 'robes', for want of a better word, are fitted. These represent the long, often highly decorated side coverings which acted as a protection against the weather, and were also capable of deflecting or slowing down long-range arrows and other missiles. On the models they are made from two or three thicknesses of model aircraft covering tissue, set with



Top: Views of the two types of war elephant described in this article. Note cases on the rear of the howdah. Elephant on left in each case is the basic Britains 'baby' model suitably altered. Airfix model has howdah omitted. Above: (1) Making a mahout, showing method of attachment. (2) Heightening the Airfix elephant with discs of card inserted into legs.

banana oil and then painted in any desired manner. If one can get some fine silk from somewhere, then this can be (with suitable professional help from female members of the family) suitably edged and decorated and will really make a wargame opponent feel that he is up against something special.

Elephant crew, apart from the mahout, would be composed of missile men of various types, with often one man doubling up with a long spear (really a short pike) which he would use to discomfit enemy who dared to approach too near to the elephant. In the model, archers are shown, and these are the Airfix Roman types with the bases cut off so as to fit neatly in the howdah. Whether they are glued



permanently in place or not depends on personal preference, and also the wargame rules to which one is playing. Some rules allow the crew to be picked off one by one, so for these it is obviously convenient to be able to remove one man at a time.

The other fighting occupant is a man with a pike, made from a Robin Hood archer with the head from a Roman archer. The figure will have to be cut in half at the waist, and then rejoined after careful trimming so as to be shown in a bending forward position. The pike, from thin piano wire, is fitted in holes drilled through the two hands (the bow having been cut away) and secured by glue. This pike should be 50 or 60 mm long. In the model, the pikeman is shown leaning through one of the cut-outs in the side of the howdah.

Colouring

The howdah can be left in a 'wood' colour, or can be painted in any fancy combination of colours that one fancies, while the same applies to any of the elephant trappings except the armour, which is bronze. The crew helmets and armour are either bronze or iron, while the crew can be anything from swarthy 'white' to dark brown. In the finished model, the elephant armour is bronze, side coverings dark blue with yellow edges and red and gold designs in the corners, while the howdah is painted in Airfix Brick Red, picked out in yellow. Shields are red with blue rims and bronze bosses.

Military Modelling—from page 315

central trunking added later. Not visible in the picture is treatment for the lower rear face, but the lower edge of the rear superstructure is 'faired in' by an angled sheet of plastic card.

Picture 3: Now the details are added, all quite evident from the drawing and prototype picture. First of all add a coaming all round the sides and front of the superstructure. This is omitted from the drawing for clarity, but is, in fact, 4 mm high all round. It should be curved outwards slightly, but I found that a good enough effect was achieved in the model by ignoring the need for this altogether.

The central cupola and air intake are simple assembly jobs with plastic card, and the hatch may be cemented open or closed. The prominent lip around the air intake was obtained by cementing a strip of thick plastic card round the edges. The engine intake is trickier because it is angled.

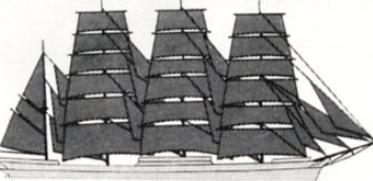
Last major addition is the walkway on the hull top each side. In the actual vehicle this was a grid to allow water to drain

through. It would be difficult to make a grid structure of this nature in miniature, unless you had fine wire gauze to hand, and I took the easy way out and just used plastic card later painted matt black. This gives a surprisingly effective result. Don't forget the cut-out to give access to the filler cap each side.

Final details are a ladder on the right rear walkway and a fender at the front. The fender plate is a 20 mm \times 8 mm rectangle of plastic card, with balsa 'timber' baulks.

Picture 4: Final details include handrails round the cupola and on the superstructure front, made from Bambi staples with holes drilled to take them, and the treads on the hull front and superstructure roof made from strips of plastic card. Give the model a coat of matt grey paint for the 1944 period, with stars (from Almarks) as shown. The formation sign for beach parties was a red anchor on a pale blue (almost white) disc and I used a black white 'dot' for this (just visible in the picture) with the anchor added with a red Biro. There was also a red outer.

SAIL PLAN



N.C.L. HACKNEY

Part 2: Running Rigging

STANDING rigging, covered by Part 1, includes the static support ropes of the masts. All the working ropes used in handling the yards and sails, however, are referred to by the single generic term 'running rigging'. Jute-coloured thread should be used for the whole of this to represent untreated ropes, and for convenience the running rigging can be divided into the two main types which follow.

Yard ropes Fig 2 shows the ropes on a square-rigged yard. The *halliard* (n) is used to haul the yard up into place and the one shown runs from the yard, through a block built into the mast and so to the deck. An alternative system for the halliard was for it to run from the mast above the yard, down to a block at the centre of the yard, back up to a block either built into the mast or lashed to it, and down to the deck. Before the late 1600s, the halliards of the lower yards were often double, running straight from the yard through blocks lashed each side of the mast and so down to the deck. Helping to raise the yard, taking its weight and keeping the ends steady are the *lifts* (p), which start from the masthead, run to blocks at the yardarms, back through blocks just below the masthead and so down to the deck. The *braces* (r) run aft from the yardarms, through blocks, to points on the deck well aft of the mast, and are used to swing the yard and its sail to catch the wind.

Sail ropes Fig 3 shows the ropes used to control a square sail and to help in furling it. The various parts of the square sail are also named on the diagram. Three basic lines are involved: the *buntlines* (s) running up the front of the sail from the foot, the *clewlines* (t) behind the sail to

furl up the corners, and the *leechlines* (v) in front to pull up the sides. The two *sheets* (w) control the set of the sail; for a 'course' (the lowest sail on each mast) these lead aft to the deck and are balanced by *tacks* (u) leading to the deck forward. For all sails above the courses tacks are not provided, and their sheets lead to blocks lashed to the yardarms of the yard below, across to blocks on the mast below the foot of the sail and so down to the deck. Leechlines in later years became the single ropes shown in Fig 3—though more than one each side was sometimes used—but particularly in the 17th century the system of ropes called *martlets* shown in Fig 4 was used both fore and aft of the sail, joined by a rope running through a block above the yard.

The spritsail is basically only a loose-footed squaresail, and is rigged for yard and sail on the same principle as a course. Fig 5 shows the rig for a spritsail, using the same letter key as for Figs 2 and 3, to which you should again refer. Note that for clarity the rigging is shown on the port side only, and in practice it is duplicated on the starboard side, except for the *buntline* (s) which on a spritsail is usually single. All ropes lead aft to their belaying points. The *braces* (r) start from the forestay above the yard, lead to blocks at the yardarms, back up to blocks on the forestay, down to blocks on the beakhead rail, and then aft. They are paralleled throughout their run by ropes called *spritsail garnets* (z), which are necessary so as to obtain sufficient purchase to swing the yard.

Fore-and-aft sails present a slightly different problem, and Fig 6 shows the complete running rigging of a mizzen mast fitted with a lateen yard and sail. The *halliard* (n) is straightforward, but the *lift* (p) is single, and runs from the aft (high) end of the yard up to a block suspended on a line from the maintop-mast head, back through a block at the mizzen crosstrees and so to a cleat on the mast. The *braces* (r) both control the forward (lower) end of the yard, and are renamed the *mizzen bowlines*. One to each side, they run from the mainmast shrouds, through blocks at the yardarm, back to blocks on the mainmast shrouds, and to the deck. The sail ropes perform the same functions as for a square sail, but the buntline is now renamed the *mizzen brail* (s), the *martlet* (v) controls

the single leech of the sail, and no clewline is provided. The *sheet* (w) controls the aft lower corner of the sail and is led through two blocks as shown to tie off on the aft rail; the fore lower corner of the sail is controlled by the *tack* (u).

Jib sails and staysails are a special case, and Fig 7 shows the rig for them. The *halliard* (n) is taken from the top point of the sail, the two *sheets* (w) from its aft lower corner, and a line known as the *downhaul* (x) runs from its top corner, down its leading edge alongside the stay (through a block in the case of the jib) and down to the deck. *Endeavour*, *Victory* and *Cutty Sark* in the Airfix range each carry one or more of this type of sail.

Lastly, two other items concerned with sails merit a mention.

Bonnet Used on the courses only, this was a strip of sailcloth the width of the sail and about one-third of its depth, which was laced to the foot of the sail in light airs. It went out of use about 1680 when the courses were fitted with reef points, and the forecourse and mizzen lateen of the *Revenge* are the only sails in the Airfix series carrying a bonnet. The moulded seams across the sail above the foot should be re-inforced by a strip of plastic card cemented across the back, and a length of running rigging thread should be tack-stitched along the width of the sail as shown in Fig 8.

Reef points Re-introduced in the mid-1600s, these are still in use. A line of short ropes sewn through the canvas, one to each width, they allow the foot of the sail to be rolled and tied up to shorten sail in high winds. Their existence and numbers depend on the date of the ship and its type, and vary even from one sail to another, and I must leave the details to a later article.

Following this basic look at running rigging, Part 3 will begin an examination of full-size rigging practice. Meanwhile, it will be a useful exercise for the novice to study any recently constructed sailing ship kit in conjunction with the drawings given here and in Part 1 so as to become familiar with the terms. Bear in mind, however, that the rigging (and rigging detail) in some kits is greatly simplified and sometimes inaccurate, so you will not necessarily find everything where it should be. Future articles will remedy this, however.

Drawings opposite ▶

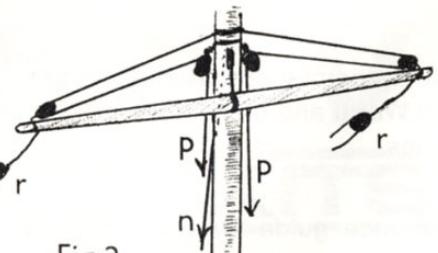


Fig. 2

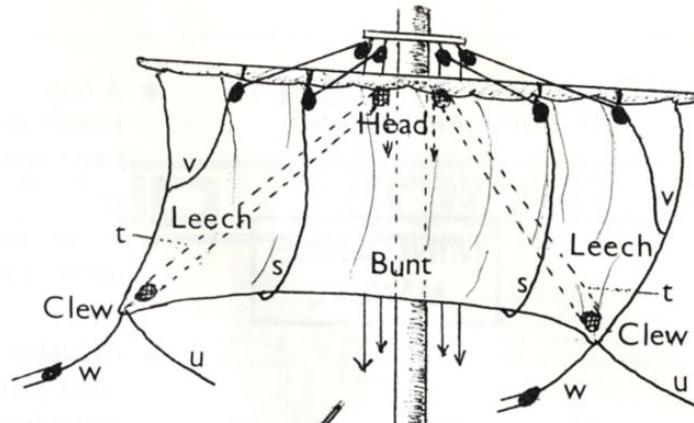


Fig. 3

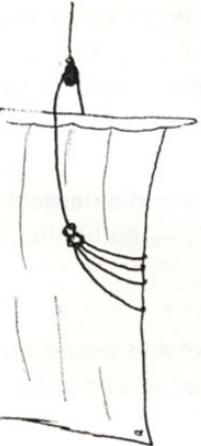


Fig. 4

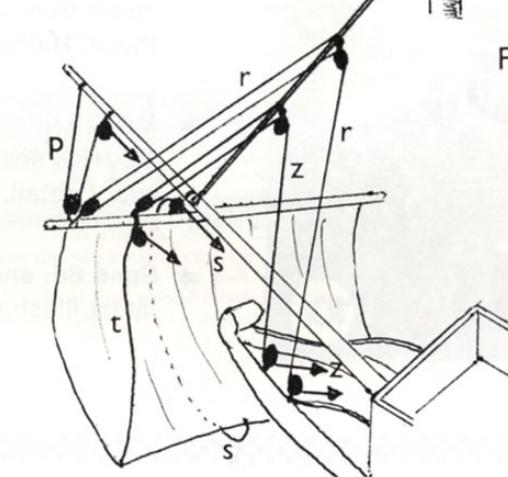


Fig. 5

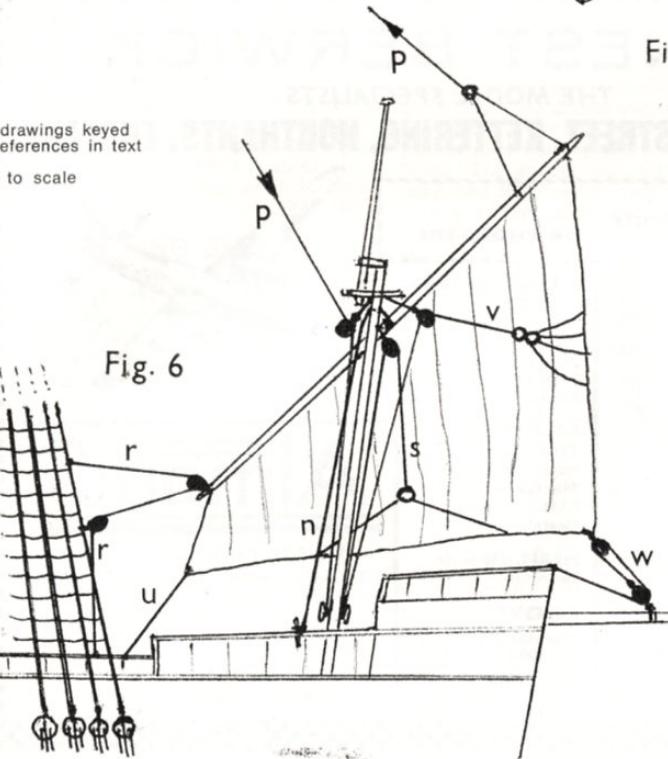


Fig. 6

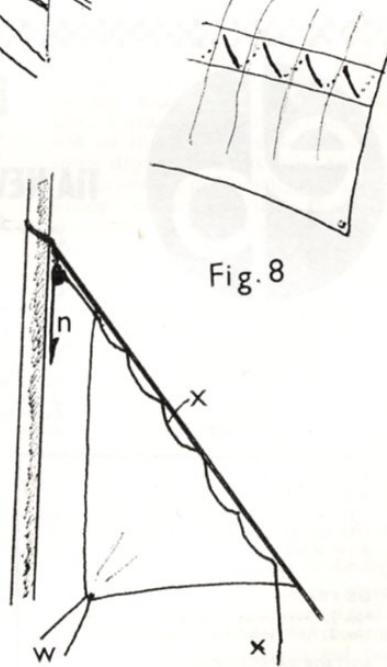


Fig. 7

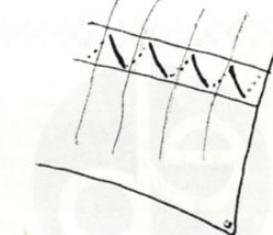


Fig. 8

FARNHAM SHOW
ANY reader living in or near Farnham, Surrey, is invited to visit another model hobby exhibition which is being held at Farnham Grammar School, Morley Road, Farnham, on the afternoon of Saturday, March 29, 1969. Several successful shows of this kind have been held at Farnham in the past, and the new one offers plenty of interesting items including model railway layouts and a great deal devoted to model aircraft including a 1 : 72 scale model airport and over 300 1 : 72 scale aircraft models built by the organisers Peter Lockhart, John Turner, and Richard E. Gardner (whose drawings appear in this magazine). Several recent conversions which have featured in this magazine will be shown also.



AVRO 548

TO supplement the conversion details for the Avro 504K kit which have appeared in our previous two issues, Peter L. Gray has supplied this picture of the conversion work

needed to produce the Avro 548 which had a V-8 engine in the otherwise standard 504K airframe. More complicated than the other conversions suggested, the 548 entails complete substitution of the engine and cowl in the kit with a nose made up from the Airfix RE8 nose. It can be moulded into the 504 fuselage with Polystyrene, and the method is apparent from the picture. Also shown is the cowling panel (from plastic card) which fits between the cylinder heads. Avro 548 model was shown on page 226 of the January issue and the colour scheme given there was, in fact, that of the De Havilland School of Flying to which G-EBFM originally belonged. It was written off before being re-painted or operated by the Henderson school.

AIRFIX magazine

NOW AVAILABLE!!
(BY POPULAR DEMAND)

**MINITANKS
MANUAL**



- ★ A fully illustrated, comprehensive and concise history of World War II and present-day military tanks and vehicles.
- ★ A constant reference guide for every military model collector.
- ★ Available from Hamleys, Beatties and all reputable model shops for only 10/- or post paid direct from **Model Hobby Products Ltd., Akroyd Place, Halifax, Yorkshire.**
- ★ MINITANKS — The world's largest range of OO/HO scale models — authentic realism in every detail.
- ★ Send 6d. and stamped addressed envelope for latest illustrated catalogue and price list.



ERNEST BERWICK
THE MODEL SPECIALISTS
11A NEWLAND STREET, KETTERING, NORTHANTS, ENGLAND

CALL

WRITE

OR PHONE 5998



Control Column
2/- + 6d 1st class mail
How To Go Plastic Modelling
25/- + Post 1/-
Scale Modeler 13/6d + 6d Post
Aircam Aviation series 21/- & 1/- Post

STOPPERS

JUST ARRIVED
1/72 No. 27. U.S.A. 1943 Stars and Bars 3/6.
1/72 No. 28. U.S.A. 1917-1943 Stars 3/6.
All in stock from No. 1 onwards.
S.A.E. for list.

DE FREY
No. 2. Invasion Stripes. 4/6.
No. 3. Red serial letters and numbers 4/6.

POSTAGE RATES (U.K. only)
Up to 10/- 1/- 1st Class Mail
10/- 22/- 2/- add 6d.
22/- £5 5/-
Over £5 post free.

Airfix 1/72 Aircraft
H.P. 0400 8/3
Grumman Duck 3/9
Airfix Ships
Q.E.II 12/11
Airfix Figures
Ancient Britons 3/9

Plus the FULL range
Catalogue 2/3
post free

CROWN 1/50 scale
Rommel Tank 14/11
Patton Tank 14/11
Soviet Tank 14/11
Type 61 Tank 14/11
Chieftain 14/11
Low Cost Motorised

BACK IN STOCK
Nichimo 1/72 5/11
Spitfire VB 5/11

Frog 1/72 Aircraft
F.W. 190 3/-
Bronco OV.10 6/9
Thunderchief 6/9
Renzan 22/6
Emily Flying Boat 32/6
Blenheim 6/-

L.S. 1/72 scale
Zero 21 (Zeke) 5/11
Hayabusa (Oscar) 5/11

Hasagawa: 1/72
F.I.M.2. Pete 5/11
Floatplane 5/11

MERIT 1/48 scale
Swordfish 12/11

LOOK!
Marusan 1/50 Scale
ME. 109 E. 7/11

Spitfire IX 7/11
Kawasaki (Tony.) 7/11

Almarks

NEW UP TO THE MINUTE 3/- per SHEET
T.9. German Panzer Division and vehicle
classification markings.

T.10. German Panzer Division markings and
warning notices.
T.11. SS Panzer Division emblems.
Plus all aircraft 1/72 markings.

NEW KITS AND MODELS

FOUR-STAR SUPER SABRE

A RECENT arrival from Japan has been an excellent 1:72 scale model of the North American F-100D Super Sabre made by Hasegawa.

This is a superb model which will add considerably to a contemporary jet fighter collection as not only is it accurate in all detail but has a considerable variety of under-wing stores which will delight the model maker.

The sixty-nine part silver moulded kit has parts for either a practice bomb carrier, under-wing fuel stores, Sidewinder or Bullpup missiles and an extending speed brake. The detail in these and such places as the undercarriage wells is excellent. In fact, the scale reproduction is so good as to make the nose wheel assembly a weakness if the aircraft is weighted to sit on its undercarriage. In addition the kit contains either hooked or straight in-flight refuelling probes and a transfer sheet with markings for three alternative aircraft. At the time of writing we have been unable to discover the tactical fighter wing on which two of these markings are based but they are highly decorative. The third set are obviously for a camouflaged aircraft but the Japanese instructions do not show how to apply them or give any clue as to their origin.

No price is available in the UK at the present time but it is to be expected that the kit will eventually be produced by Frog. The Hasegawa F-100D is an excellent model and well worthy of inclusion in any collection. A.W.H.

WORKING SHIP

WE have received from Jones Bros of Chiswick the Riko kit of the SS *Strathardle*, which is a 1:450 scale model of one of the P & O cargo liners.

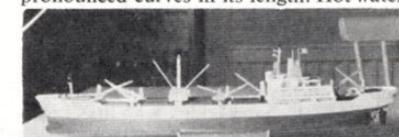
The kit is in three colour plastic, green, yellow and white, which are the basic colours of the prototype. The parts are very clean and need hardly any trimming. The hull is in one piece, a distinct advantage in our experience since some two-piece hulls have shown a discrepancy in the two halves. All the parts are numbered and the instruction sheet has prefix letters indicating the colour. It is essential to study this sheet very thoroughly to get the correct sequence of attachment of the various units.

Our sample came complete with the Mabuchi motor and prop shaft, etc. So we installed the 'works' in the hull first; the small compartment at the stern which carries the prop shaft was filled with the grease supplied and proved an effective

seal against water seepage.

Two Ever Ready HP 11 batteries were installed—the U2 quoted on the instructions is too large—and a preliminary 'sea trial' given. She motored like a speed boat, but as the idea was a trim test, it was returned to the stocks for completion.

The only difficulty encountered was the main deck which unfortunately had two pronounced curves in its length. Hot water



treatment did not entirely cure this so the deck was cemented to the hull with a load of weights and elastic bands. When this was thoroughly set, the superstructure and fore and aft decks were attached.

A detachable section amidships gives access to the batteries. It would be worthwhile to make two additional apertures in the main deck, one under the superstructure—which would be clipped into position—to give access to the motor and the other at the hatch cover alongside the motor switch, to allow extra grease to be inserted in the prop shaft mounting.

A touch of black and silver paint was given to certain details and the completed ship given a maiden voyage in a large garden pool built specially for miniature boats. The rudder was set for a wide circle and she was off—very rapid, so one battery was removed; but even with only 1½ volts she was somewhat fast for her size. Price is 35s 9d.

The kit makes a very pleasing model and would justify super detailing with rigging, etc, on masts and derricks. B.L.

THREE FOR FUN

THOUGH they are likely to have only limited appeal to our readers, we've recently had samples of three kits from Japan which are based on fictional futuristic subjects. Each is packed with gimmicks likely to please younger modelers, however, and in the case of the first, an 'Apollo 1' lunar exploration vehicle by Tamiya, the packaging and presentation is superbly done. Despite its name, this model has no connection with the US space programme, and consists basically of a tracked chassis with dummy 'hover' rotors, an enclosed cab, and a wheeled trailer unit. In size the model works out about the same as the average 1:35 scale motorised tank. Tracks and standard of finish are up to the usual

high Tamiya standard, but the really outstanding feature of the kit is the fact that the motor unit and chassis come ready assembled, obviously with younger modelers in mind. A similar kit with the same tractor unit is also made by Tamiya called 'Jupiter 2'. This differs by having a rocket launcher trailer instead of the cargo trailer. Each of these Tamiya kits costs 39s 1d.

The other two kits are by Marusan. The first is a sort of lunar half-track called a Magmalizer which also works out at about 1:35 size if it has a scale at all. This has a four-wheel leading bogie and a tracked chassis at the rear with the usual Mabuchi motor, gear train, and battery power. The particular gimmicks in this model are twin rocket launchers which fire dummy missiles, and a rotating nose cone, presumably for boring through rock. This kit offers a lot of features for its price of 29s 1d. Second kit is a sort of supersonic fighter called the Ultra Hawk, complete with pencil slim fuselage and delta wings. Priced at 19s 1d, it has a motor which drives the undercarriage and has an added attraction in that its fuselage breaks into three in various combinations for 'docking' and to form a floating boat section. The two Marusan kits are available in limited numbers only, and all those reviewed here came from Jones Bros of Chiswick, who hold stocks.

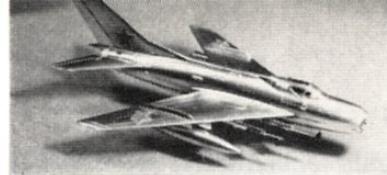
Last month, incidentally, we quoted the wrong price for the Otaki Puma armoured car. It does, in fact, cost 23s 1d, not 19s 1d as we stated. Apologies if this has inconvenienced anyone.

C.O.E.

NEW TRANSFERS

NEW transfers continue to be released with a frequency which would not have been believed just a year ago. Latest offering from De Frey Decals, 248 High Road, Leyton, London E10, is a large sheet of 1:72 scale bomber codes and serials in dull red for RAF machines. Four complete sets of alphabet letters are included with most letters repeated in an alternative style within each set. Thus the sheet provides for virtually any RAF bomber coding style. There are six sets of small alphabets for aircraft serials, and six sets of serial digits, 0-9, again with alternative styles. So for 4s, the price of the sheet, you get enough red bomber codes and serials to last the average modeller a lifetime. Good value this—and the price includes postage.

Three new German Army transfer sheets have been released by Almarks. *Continued on next page*



New Kits—continued

all extremely handy for the military modeller working with Airfix or Mini-tanks AFV models. Sheet T9 contains vehicle markings for eleven different panzer divisions, a selection of tactical vehicle markings, Kliest and Guderian panzer group markings, and C-in-C flags and vehicle markings. Sheet T10 contains markings for no less than 26 panzer divisions, in white and yellow, German national flags for turret tops, and seven pairs of warning signposts for minefields, explosives, and fuel dumps, all ideal for wargames, dioramas, or miniature German airfields. Lastly, sheet T11 features the emblems of seven SS-Panzer divisions, seven pairs of each all in white. At 3s each sheet, these new issues are all up to the usual high Almarks 'value for money' standards, with matt finish, good register, and plenty of markings per penny of the price.

Almarks are now sold by most big model shops and can be had by post from shops advertising in this magazine. C.O.E.

LINDBERGH DO 335

SEEKERS of the unusual in aircraft configuration will be pleased to know that the Lindbergh kit for the Do 335 twin-engined fighter—which had an engine at each end—is once again available in Britain. We reviewed this long ago when it was first released, but for newer readers, it's a very simple model to assemble with only about two dozen parts, all cleanly and neatly moulded. The transfers with the kit are none too good and are best replaced, but otherwise this is a very worthwhile addition to any collection of World War 2 Luftwaffe aircraft. The scale is 1:72, and it works out at about Thunderbolt size when complete. As a tricycle undercarriage machine it needs weighting at the front end during assembly if it is to be free-standing. Stocks are held by Ernest Berwick Ltd, 11a Newlands Road, Kettering, Northants, who sent ours. Price 8s 9d. C.O.E.

1:100 SCALE AIRCRAFT

THE Japanese manufacturer, Tamiya, has produced the first five of a new 1:100 scale series of aircraft kits featuring well-known present-day fighters. These include the BAC Lightning F6, MiG-19 Farmer E, Dassault Mirage IIIC, LTV A-7A Corsair II and Douglas A-4E Skyhawk.

At the time of going to press we had the chance to make only one model, and as a sample of the range chose the MiG-19. This proved to be excellent. Detailing was sufficient and kept within scale limits, but there were no moving parts as is to be expected. Alternative parts were provided to depict the undercarriage down or retracted and the 38 parts fitted very well together.

The fine detail made such parts as undercarriage legs very prone to damage and these have to be removed with great care from the sprue. Similarly the thin

The Tamiya MiG-19, 1:100 scale.

plastic on some parts mean that the completed model will have to be treated with great care during painting and subsequently during storage.

Looking quickly through the other kits we were of the opinion that each one showed a very great degree of accuracy and we hope to see more available in this scale. They will go well with the old 1:100 scale kits made by Faller.

In every case, instructions and paint schemes are printed in English and the construction details are well laid out. These five kits are most suitable for the model maker with a fair amount of experience. Although simple to construct they will need patience to complete satisfactorily. Alternative markings for either Russian, East German or Cuban aircraft were supplied in the MiG-19 kit and in the others, French and Israeli markings came with the Mirage, No 5 Squadron or Saudi Arabian markings with the Lightning, RAN or US Navy markings with the Skyhawk and two sets of alternate squadron markings for the Corsair.

The sample which reached us for review were supplied by Jones Bros, of Chiswick. They retail for 5s 11d each and are good value for the price. A.W.H.

NEW CAR MODELS

SINCE our last round-up of new car models, numerous new releases have come to hand. From Lone Star comes three very neat models to about OO scale which will be handy for railway or scenic modellers. First of these is a BLH Austin-Weston Mobile Crane, just right for working in your model goods yard or on a modern airfield layout. It has a swivelling, elevating jib and heavy duty rubber tyres and would make a very good 'load' for a railway wagon, all else apart. Price is 3s 6d. Another model of similar size is a Euclid 82-80 twin-power crawler tractor in authentic Euclid light green and very imposing with its twin motors. It has a seat and dummy controls, plus rubber crawler tracks and engine detail visible through the bonnet sides. Again it's ideal for a lineside vehicle on rail layouts. Price is 3s 8d. Last of this Lone Star group is an excellent Chrysler Imperial to 1:73 scale with opening doors, boot, and bonnet, full interior detail, splendid finish and particularly realistic wheels and tyres, best we've seen on a model in this small scale. Ideal for the lineside, it would also re-paint very well to make a modern army staff car in scale (near enough) with Airfix troops and tanks. Priced at 3s 6d, this is a model in a new Lone Star 'Flyer' series which is particularly free-running and designed to go with a gravity powered race track which Lone Star are introducing.

Most recent of the new Corgi Toys we've had is a very fine replica of the latest Mk II Mini-Cooper which is quite a stunner with plated radiator grille and trim, tilting seats, opening doors, boot, and bonnet, neat new wheel hubs and tyres, and a simulated sun-roof which is most effective. It also has jewelled headlights. Price is 7s 6d. The other new Corgi is equally good, being a Scammell tractor with a long flatbed trailer and three animal cages with lions, bears, and tigers. Finished in the Chipperfield Circus livery, this model is splendidly detailed, the prime mover having twin rear wheels, superb chassis and cab, and an automatic coupling gear with retracting dolly wheels to support the trailer which drop automatically on uncoupling. This is one of the best models of commercials we've seen. No doubt it will also appear later from Corgi in non-circus guise. Price is 2s 11d. Both these Corgi models scale out at about 1:43. C.O.E.

plastic on some parts mean that the completed model will have to be treated with great care during painting and subsequently during storage.

Looking quickly through the other kits we were of the opinion that each one showed a very great degree of accuracy and we hope to see more available in this scale. They will go well with the old 1:100 scale kits made by Faller.

In every case, instructions and paint schemes are printed in English and the construction details are well laid out. These five kits are most suitable for the model maker with a fair amount of experience. Although simple to construct they will need patience to complete satisfactorily. Alternative markings for either Russian, East German or Cuban aircraft were supplied in the MiG-19 kit and in the others, French and Israeli markings came with the Mirage, No 5 Squadron or Saudi Arabian markings with the Lightning, RAN or US Navy markings with the Skyhawk and two sets of alternate squadron markings for the Corsair.

The sample which reached us for review were supplied by Jones Bros, of Chiswick. They retail for 5s 11d each and are good value for the price. A.W.H.

SINCE our last round-up of new car models, numerous new releases have come to hand. From Lone Star comes three very neat models to about OO scale which will be handy for railway or scenic modellers. First of these is a BLH Austin-Weston Mobile Crane, just right for working in your model goods yard or on a modern airfield layout. It has a swivelling, elevating jib and heavy duty rubber tyres and would make a very good 'load' for a railway wagon, all else apart. Price is 3s 6d. Another model of similar size is a Euclid 82-80 twin-power crawler tractor in authentic Euclid light green and very imposing with its twin motors. It has a seat and dummy controls, plus rubber crawler tracks and engine detail visible through the bonnet sides. Again it's ideal for a lineside vehicle on rail layouts. Price is 3s 8d. Last of this Lone Star group is an excellent Chrysler Imperial to 1:73 scale with opening doors, boot, and bonnet, full interior detail, splendid finish and particularly realistic wheels and tyres, best we've seen on a model in this small scale. Ideal for the lineside, it would also re-paint very well to make a modern army staff car in scale (near enough) with Airfix troops and tanks. Priced at 3s 6d, this is a model in a new Lone Star 'Flyer' series which is particularly free-running and designed to go with a gravity powered race track which Lone Star are introducing.

By adding some radar aerials made from stretched sprue, we found that we could easily convert the Mk IF into the first radar equipped night fighter.

Our sample was supplied by Modeltoys of Portsmouth. Jones Bros, Chiswick, also hold stocks. Price is 5s 10d. A.W.H.

SHOW-CASE

READERS who seek show-cases for plastic models may like to know that one is now available from Motor Racing Shops Ltd, 43A Selsdon Road, South Croydon, Surrey, price 36s including post. Strongly made in heavy Perspex, it measures 14½ x 7½ x 3½ inches. Intended mainly for large scale car models, it also holds anything else within these dimensions; we got three 1:72 scale aircraft or 12 1:76 scale tanks in our sample. These cases have to be hand-finished, hence the high price. From BMW Models Ltd we've received samples of several new large scale car kits, including the Honda S800 and Porsche Carrera. Reviews will appear next month. C.O.E.

MODEL TOYS

PLASTIC KIT SPECIALISTS—ASSOCIATE MEMBER I.P.M.S.

A.I.R. DECALS

A range of high quality, well researched and produced, American manufactured decals covering mainly post-war subjects. Finish is matt or gloss as appropriate. No. 1. Black lettering, over 200 separate items, wording "US Navy", "US Marines", "USAF", "US Air Force", "US Army", plus 5 sizes of numbers and other letters. 1/72. Price: 15/-.

No. 2. White lettering, "US Navy", "US Marines", plus 5 sizes of numbers. 1/72. Price: 10/-.

No. 3. Nationalist Chinese national insignia, 54 roundels in 12 sizes. 1/72. Price: 10/-.

No. 4. Israeli national insignia, 54 roundels in 12 sizes. 1/72. Price: 10/-.

No. 5. Japanese national insignia, "WWII", over 100 meatballs in 10 sizes, blood red with and without white outline. 1/72. Price: 15/-.

No. 6. USAF insignia (Stars and Bars), over 60 stars, 15 different sizes, neutrality flags in various sizes and special aircraft markings (Gas cap, Reserve, Beware of Blast, Danger etc.). Also includes mini-stars as per present day style in Vietnam. 1/72. Price: 15/-.

No. 7. USAF insignia (Stars and Bars), over 30 stars in 10 sizes from 2-1/8" to 3/4".

also neutrality flags and special aircraft markings. 1/48. Price: 15/-.

No. 8. Air National Guard, 1/72 and 1/48 scales. Black and white lettering, Minute Man emblems in 5 sizes, A.N.G. in sizes from 5/8" to 3/32", 5 size alphabets, plus other Air Guard markings. Price: 10/-.

No. 9. Black lettering covering USAF markings. This sheet is a continuation from sheet 1. Lettering from 1/16" to 5/8", other markings include "M.A.T.S.", "M.A.C. Pacific", "Atlantic" and "Continental" Divisions in white for tail markings "US Army", "USAF", "US Navy", "US Marines" in sizes from 3/32" to 1/4" in both black and white. "United States" in 4 sizes and many more US markings. This sheet with No. 9 is the most complete set of US markings (lettering) ever produced in decal form. 1/72. Price: 15/-.

No. 10. USAF insignia (roundels used from 1921 to 1942, blue circle, white star, red centred dot). Sizes from 1-1/8" to 5/16". Price: 10/-.

No. 11. USAF insignia, as in 1942, blue circle with white star. Over 55 stars in 12 sizes, all scales. Price: 10/-.

No. 12. USAF insignia, blue circle with white star and yellow outline, over 55 stars in 12 sizes, all scales. Price: 10/-.

No. 13. US insignia (stars and white bars, blue field with red border). Over 30 stars in 10 sizes, all scales. Price: 15/-.

No. 14. US insignia 1943 (stars and white bars on blue field), Neutrality flags in various sizes plus special aircraft markings, all scales. Price: 15/-.

'MEN AND MACHINES' SERIES OF BOOKS

AMERICAN FIGHTERS W.W. II. Vol. I. 30/- postage 1/-.

DE-FREY DECALS (Matt finish)

Sheet 3. 1/72 scale RAF Bomber Command dull red squadron coding, 11/16" alphabets in two styles repeated four times, also includes alphabet and numerals 0-9 repeated four times in 3/32" size for serial numbering. Price: 4/-.

A.B.T. DECALS 1/72. A selection from this excellent range. 5/- each. No. 1. R.A.F. P. Clostermann's Spitfire IX, 602 Sq., and Tempest V, 3 Sq.

No. 2. French A/F. P-40 and P-47 of G.C. "La Fayette".

No. 3. Luftwaffe. ME Bf109E JG.26 "Schlageter", A. Galland. ME Bf109E 9/JG.26 "Hollendorf".

No. 4. Luftwaffe. FW.190A of III/JG.2 "Richthofen", and as flown by Hptm. Schnell of 9/JG.2.

No. 5. R.A.F. Spitfire I, 610 Sq. in 1940, and Spitfire II, 118 Sq. 1941.

No. 15. U.S.A.A.F. B-29 Superfortress, 393rd B.Sq. "Enola Gay".

No. 16. French Nieuport 17, emblems for Guynemer, Boyau, Ambrogi.

No. 18. French Spad XIII. SPA-26, SPA-48, SPA-73, SPA-103.

No. 19. French Navy Corsair, 15th Flotilla, Suez 1956, Royal Navy Sea Hawk, HMS Eagle, Suez 1956.

No. 20. French A/F. Curtiss H-75, G.C.1/4, G.C.11/4, G.C.1/5, G.C.11/5.

No. 21. Vichy-French wing and fuselage stripes.

No. 22. U.S.A.A.F. Curtiss P-36, 55th, 35th, 27th, 94th Pursuit Sq.

No. 23. French A/F. P-51B. P-38F-SB of Groupe de Reconnaissance 11/33 also

Mirage IIIR.

No. 24. Belgian A/F. Gladiator I, Hurricane I, CR.42, in 1940.

No. 26. Luftwaffe. Ju-87B, "Immlermann Geschwader". III GRP Stab (Rudel), 5/11, 6/11.

No. 27. Hungarian CR-42 and Bf109G, Croatian Bf109G, A.R.S. Italiana Bf109G, Luftwaffe Bf109G 11/JG.54.

No. 30. Luftwaffe. Bf109G 11/JG.52 as flown by E. Hartmann, 1944.

No. 37. Luftwaffe. ME Bf109E 1/JG.52 "Wespen".

No. 43. ME Bf109B Condor Legion, JU-87B "Jolanth Kette", Fiat G.50

Aviazione Legionaria, Polikarpov I-16

Type 10, Ejercito Del Aire Espanol.

All Almarks in stock as available.

Postage for all decals: Up to 3 sheets, 6d. 4 and over 9d. UK only.

BY RETURN POSTAL SERVICE

Postage and Packing. (UK rates only)

Up to 10/- 1/- (1/6)

10/- to 22/- 2/- (2/6)

22/- to £5, 5/-

Over £5, No charge.

Refer to amount in brackets

for first class mail.

LS AIRCRAFT KITS

Oscar Mk I

1/72 4/11

G3M1 Nell Bomber

1/72 24/6

G3M1 Nell Transport

1/72 24/6

Hiryu (Peggy) Bomber

1/72 25/11

Ki-109 Exp. Fighter

1/72 25/11

Ki-67 Yasukuni B.

1/72 25/11

MONOGRAM Aircraft Kits

Boeing F4B-4

1/72 10/11

Curtiss P-6E

1/72 10/11

Curtiss F11c-2

1/72 27/11

G.HU-16B Albatross

1/72 23/10

B-52D Superfortress

1/72 23/6

P-38 Lightning

1/72 31/5

FUJIMI

A-4E Skyhawk

1/50 17/6

F-8D Crusader

1/70 13/6

NICHIMO A.F.V.'s Motorised

Abbot 105 mm SP Gun

1/35 27/11

M.109 SP Howitzer

1/35 27/11

AMX 13-VTP Carrier

1/35 27/11

AMX 13 Light Tank

1/35 27/11

Centurion Mk 10 Tank

1/35 37/11

Chieftain Tank

1/35 37/11

NITTO Motorised

US M-4 Cargo Tractor

1/35 25/6

US M-29 "Weasel"

1/32 29/11

US Army Half-track

1/35 25/6

OTAKI Motorised

Ger. Arm. Car Puma III

1/35 23/11

TAMIYA Motorised

Scorpion A. Car

Letters to the Editor

P-40 pilot

ON looking through the September issue of the magazine I noticed on Photopage three pictures of ex-RNZAF aircraft. I was sure I had flown the P-40 shown in picture 2, so I looked up my old log book and there sure enough was the entry 'May 13, 1944, NZ3082, 35 minutes'. I flew her again on June 6 and 9, 1944.

T. B. Pearce (ex-WO, RNZAF), Birkenhead 10, New Zealand.

Daktari in 'OO'

WHILST looking through my AIRFIX magazines, I thought of an idea which may be of use to younger readers. As Airfix now produce Tarzan set in the OO/HO range, I thought by combining them with the Airfix Bloodhound Missile set, one could make the figures from the 'Daktari' television series.

First take the Land Rover and remove the canvas hood and build an interior as shown in the February, 1968, edition of AIRFIX magazine. Then take a driver as found in the Quad or Jeep, and remove his head. This is replaced by a head off one of the hunters in the Tarzan set, this becoming officer Hedley.

For Daktari himself I used the officer from the Bloodhound set with his head replaced by Tarzan's head. I made Jack and Paula from a few civilians I had left. I used Tarzan's 'Cheeta' the chimp for 'Judy' and a lion for 'Clarence'. Other animals seen around the compound are the elephant, zebra and cheetah. All Land Rovers are painted sand with green zebra stripes running vertically. The compound can be made from Bellona buildings, or scrap balsa and straw.

Michael C. Grabarz, Monks Risborough, Bucks.

Markings

I WAS interested in the article on 'Armoured Division Markings' in the November, 1968, issue.

Table 2 states that 153rd Field Regt, RA, was equipped with 24 (towed) 25 pds. May I dispute this? The Regimental History, 153rd (Leicestershire Yeomanry) Field Regiment, RA, TA (a private publication) gives the following information:

In August, 1940, 'B' Battery replaced its 18 pds with 75 mms. On October 9, 1941, the Regiment ceased to be 1st Corps troops and became part of the Guards Armoured Division. In November, 1943, the Regiment became an SP regiment equipped with Sextons. 12 guns and 13 OP tanks (Shermans) arrived in mid-December, '43.

A Times photograph shows 129 Battery of the Regiment outside Douai in SPs. The leading gun flies a large Union Jack and a later gun flies a French flag. The Guards Armoured Divn 'eye' is on the nearside on the vertical surface of the gun mounting.

In another photograph showing the 'Farewell to Armour' parade, the regi-

ment's SPs are shown and the markings are as follows: on offside vertical surface the figures 78 (not quite clear on this photo but very clear on a photo I saw at an Old Comrades Dinner) on RA red and blue flash, and under the gun in white the name *Cesar*. On the nearside is the Guards Armd Divn flash. On the side of the gun position is the number of the vehicle, S2339? in white lettering. The next SP bears the number S234162. Above the 78 on the offside is the cypher C1, possibly the troop number. Guns, OP tank carriers and scout cars of the Regiment were painted battleship grey and the wheeled vehicles in army green.

John Sills, Leicester.

Squadron found

IN the February, 1968, edition of AIRFIX magazine on Photopage there was a DH9a (E9727) built by Mann Egerton of Norwich, of which the Squadron is said to be unknown. I think the aircraft is from 18 Sqn RAF which flew mail services between Lympne and Cologne.

Alan McDade, Co Antrim, N Ireland.

Airwork Seahawk

IN the February issue of AIRFIX magazine you published a reader's photograph of a Seahawk F(GA)6, XE339, operating from the FRU, Hurn.

You state in the caption that this aircraft has 'retired'. However, I wish to inform you that XE339, together with its stablemate XE390, is still very actively engaged in operations from the FRU.

J. B. Church, Airwork Services Ltd, Hurn.

We're happy to set the record straight; Adrian Balch, who took the picture, thought that the aircraft had ceased flying since he had not seen it recently.—EDITOR.

Wrong colour

I MUST congratulate Airfix on the model of the *Queen Elizabeth 2*. But the lettering 'Queen Elizabeth 2, Southampton' on the stern of the ship is printed in black. On the real ship this lettering is in white. Despite this, I think it is a magnificent kit.

Robert Kelly, Coventry, Warwicks. The Airfix kit was designed before this detail was finalised on the actual ship.—EDITOR.

Landing lights

AIRCRAFT landing lights are an important and conspicuous detail which receive little if any mention in modelling.

They are best prepared from bright aluminium foil (slightly thicker than kitchen foil) punched out into small discs, using a stationery punch, or similar, depending on the size required. Make one radial cut, fold to a 120° cone, and secure with a smear of impact adhesive. Using an appropriately sized twist drill, prepare a depression to receive the reflector (it will be 120°) and secure it in place, again using impact adhesive.

Any modeller intending to make up

either the Airfix or Revell Thunderbolts in SEAC colouring and markings should note that Thunderbolt FIs and early Thunderbolt FBIs (all camouflaged green/earth) had Hamilton Standard air-screws with the large hub as supplied by Airfix, but many of the later Thunderbolt FBIs (serials prefixed KJ and KL) had Curtiss Electric air-screws, as supplied by Revell, with tapered hub, eg, KJ344: AW-A (42 Sqn).

In smaller sizes the difference between a cone and disc is hardly noticeable, although a small central mark, eg, pin-prick, is needed to represent the bulb.

The above method could, I feel, be adapted to larger scale work, eg, car headlamps, although I personally have never tried it.

C. A. Jones, London SW15.

RAF Regiment

WHILE painting the Airfix Guards Colour Party set recently, I discovered a very simple way to convert them to the RAF Regiment Colour Party. First of all you take all the guardsmen and remove their heads. When this is complete, replace them with the heads from the 1914 British Infantry with Bostik or a similar impact adhesive.

Paint the figures overall with RAF blue (mixed from matt dark grey and matt blue). Cap peak and boots are gloss black and the shirt is indicated by light blue at the throat with black for the tie. Rifle slings and belts are white. The standard must, of course, be painted as the RAF colour.

P. J. Senior, Oldham, Lancs.

SEAC Thunderbolts

MAY I comment on the letters from Mr R. C. Wignall and Mr J. C. Page in the January issue?

(1) I wonder if Mr Wignall has direct confirmation of the colouring of HD185, FL-D, as green/grey? When an article with a scale drawing of this aircraft by G. R. Duval was published in *Aeromodeller*, the author admitted that the stated colouring was assumed and that the 'dark earth' colour often faded to purple-grey (*Aeromodeller*, February, 1966). HD-serialled Thunderbolts were green/earth as standard.

I should be interested to learn what confirmation Mr Wignall has of the code TH- on 20 Sqn Spitfires; 20 Sqn Tempests carried the code HN-, eg, PR529, HN-U, and I have been told (without confirming evidence) that this code was used on Spitfire XIVs from November, 1945.

Several authorities have given HH- as the code of 273 Sqn and this may have been used on earlier aircraft, but on Spitfire VIIIIs (March, 1944–December, 1945) the code was MS-, eg, LV768, MS-X, as on later Spitfire XIVs, eg, RN218, MS-F. I have been shown photographs by an ex-pilot of 273 Sqn showing the MS- code and have notes of the serials from his log-book.

(2) Many of the original Thunderbolts of 134 Sqn in late 1944 (all in green/earth camouflage) had the aircraft letter repeated in black, 8 or 9 inches high, on the lower front of the white cowling band, eg, HD196:GQ-B. The fuselage codes were 24 inches high and serial black.

Any modeller intending to make up

AIRFIX magazine

either the Airfix or Revell Thunderbolts in SEAC colouring and markings should note that Thunderbolt FIs and early Thunderbolt FBIs (all camouflaged green/earth) had Hamilton Standard air-screws with the large hub as supplied by Airfix, but many of the later Thunderbolt FBIs (serials prefixed KJ and KL) had Curtiss Electric air-screws, as supplied by Revell, with tapered hub, eg, KJ344: AW-A (42 Sqn).

Some of these aircraft entered squadron service in USAF finish of natural aluminium with green anti-glare decking. A number of these were of the sub-series P-47D-30-RE; among them KL339:GQ-B (mentioned by Mr Page) flown by F/O Salter, May–June, 1945, had a green-painted dorsal fin extension; KL856: KW-D (615 Sqn), flown by Sgt Capewell, had an unpainted fin extension similar in shape to that of the P-47N. KL314: ZT-W (258 Sqn) had no dorsal fin extension. Identification bands and cowlings of KL339 and KL314 were dark blue, and of KL856 possibly black.

A final comment on Mr Bowyer's list: 28 Sqn Hurricanes and Spitfires carried no code; 152 Sqn (code UM-) was omitted; an ex-Thunderbolt pilot of 146 Sqn believes that the squadron code was NA-; I wonder if any readers have any information about this squadron?

Geoffrey J. Thomas, Worplesdon, Surrey.

Plastic rods

IN answer to Mr Crane's letter in the January, 1969, edition, I find that the plastic frames, to which the small toys given free in cereal packets are attached, are ideal for modelling purposes. The diameters of these rods vary between .05 and .100 inch. There are many obvious uses for these rods, such as for gun barrels, exhaust pipes, etc.

R. Amor, Hayes, Middx.

Heinkel conversion

CONCERNING the Heinkel IIIH conversion in January's issue, may I make some suggestions to assist beginners?

The Revell Fw 200 Condor kit has an upper gun position transparency which is the same size as needed for the Heinkel, and may be used for this purpose, with only a little filing of the window frames needed.

The Airfix Ju 88 exhausts can be used, these also being the same type and size when the tail-end is built up to make it a little longer.

An error has been made in applying the transfers. When looking at the picture of the finished model, I noticed that the emblem of KG 26 was facing the wrong way to that of two pictures in the Profile, otherwise, in my opinion, the conversion is excellent and I congratulate Alan W. Hall.

Stephen Horne, Emsworth, Hants.

Libs remembered

FURTHER to the letter in the January issue, I should like to point out that whilst Mr Jeeves may be right when he claims that 355 and 356 were the first two Liberator squadrons to be formed in India, they were not the first to operate from India. This distinction belongs to 159 Sqn who originally operated in the Middle East together with 160 Sqn, these being the first two squadrons of any air force to operate with this type of aircraft. Later, under W/Cmdr Skinner, 159 moved to Salbani, arriving during the latter part of 1942, whilst 160 continued on to Ceylon. Both squadrons operated Liberator II aircraft and 159 continued to use this type on night ops throughout the remainder of 1942–43, before being re-equipped with B-24D and B-24J. Aircrav who had completed their tour were posted to Bangalore to instruct personnel for the many later squadrons, such as 355 and 356. To forestall further protests, I must mention that the 'heavy' bomber strength of the RAF in Bengal during the early days included 99 Sqn and 215 Sqn, both of which flew Wellingtons. One last point, on one occasion during a full moon period the entire serviceable strength of four Libs did a formation night 'op' to Toungoo. I know this last was unusual but was it a record?

R. King (ex-159 Sqn), Salford, Lancs.

Belgian Battles

I HAVE read the letter of Mr D. C. Robertson about the Airfix Fairey Battle in the December, 1968, issue of AIRFIX magazine. I would like to make some additional remarks.

Mr Robertson was right when he said that the radiator cowling of the Airfix model is too short for the Belgian version, but he didn't mention anything about the transfers and the colour scheme. The Belgian roundels of the kit transfers aren't right in size and type. The right ones can be taken from the ABT sheet No 24 (the Hurricane roundels). Apply the small ones to the fuselage mid-way between the gunner's cockpit and the fin. The big ones go on the upper and under surfaces of the wings around the middle of the ailerons. The numbers may be used direct from the kit transfers.

Further, there are some remarks about the colour scheme: the upper surfaces were painted in semi-matt dark green and dark earth colours (MAP shades) following MAP Scheme A. But the under surfaces were certainly not light grey, as the kit instructions tell us, but matt silver, this was also the case with the Belgian Hurricanes, Gladiators, and Renards and the Fairey Foxes and Fireflies.

To close my letter I would like to say that I'm building the Hawker Turret Demon which is the subject of a three-view drawing in 'Fighting Colours', Part 1, in the September, 1967, issue of AIRFIX magazine. I should like to get some detailed drawings of the turret, so that I can build it. Can anybody give them?

André Jungbluth, Antwerp, Belgium.

Motorised tank

READERS may be interested in details of my OO scale SP gun which I have motorised. The wheels and lower hull are standard Tiger I from the Airfix kit, only the upper hull being added.

Two batteries are housed in the rear lower hull, the hull rear being detachable for battery changing, etc. The motor is situated in the rear of the fighting compartment and to one side, the other side and front being used to contain the gearing. The motor is 3 V from a Hong Kong toy and the 120:1 gear reduction consists of eleven gears from Smiths clocks from the local clock repairer; the eleven gears are necessary as it is essential that the gear on the front drive wheels is small enough to be contained by the hull front.

AIRFIX KIT PRICES

DUE to the increase in purchase tax announced last November, all Airfix kit prices in Britain are now, of necessity, slightly increased. New prices are as follows: Series 1–2s 9d; Series 2–3s 9d; Series 3–5s 6d; Series 4–8s 3d; Series 5–10s 6d; Series 6–13s 9d; Series 7–16s 6d; Series 8–19s; Series 9–21s 6d. Similar increases will be noted with other kits advertised or reviewed in the magazine.

325



Mr Parker's motorised model.

The speed on the flat is 12 inches in 9 seconds and the vehicle will climb a 45° slope before slipping. The Airfix tracks are, of course, useless for running and two broad elastic bands are used instead; I keep scouting around for a more realistic track, from time to time, but without success.

The pundits will shoot me down on several points as I realise the model does not represent any particular type of tank, the model being made purely as an exercise in motorising models of this scale; no doubt it could easily be converted to a Sturmtiger. The escape hatch at the side is there to cover up the motor shaft bearing which I was too lazy to move.

The motor is switched on by turning the commander.

B. Parker, Otley, Yorks.

Ford tri-motor

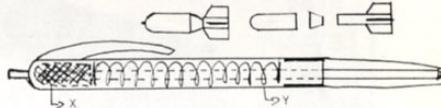
AS regards the Ford 5-AT Tri-motor mentioned in J. Rollins' letter in the July issue, its serial was X5000. It was impressed by the RAF from G-AACE and it originated as NC440H. Unfortunately I have no details of its codes.

Robert Finch, Shoreham-by-Sea, Sussex.

Dummy bombs

EVERY plastic modeller knows that various accessories can be easily obtained from everyday life objects. So, dummy bombs can be formed by using some parts of a Bic M-10 ballpoint pen.

Basically, the bomb is formed by the part in which the ink cartridge is pushed. To get it, the ballpoint pen must be broken. Then cut the end to obtain a 13 mm long body. To give a more aerodynamic shape, sand the head with a sheet of emery paper. The head of a pin pushed through the centre of the bomb will form the bomb tip. At the rear, a 3 mm truncated cone made from plastic



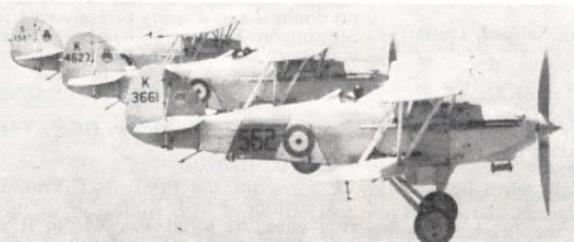
X—part used for bomb; Y—discard spring. Putty is added to form the end of the bomb. The tail can be added now.

The four wings of the tail are made from plastic card. Dimensions are: 7 mm at the base, 5 mm at the top, height 3 mm. The four wings are cemented on a 15 mm section taken from the ink cartridge. Now the tail can be pushed into the body. A coat of paint will give the final touches. The drawing shows the stages of this easy conversion.

R. Cauchie, Brussels 9, Belgium.

photoPAGE

More rare pictures from readers with captions by Michael J. F. Bowyer. A free Airfix kit is awarded for every picture published, but please note that there is usually a delay of some months before publication due to the limited space at our disposal.



2

Key: (1) Keith Davidson sent this useful picture for modellers showing Beaufort II, N1113:D1 of No 3 Operational Training Unit early in 1942 with dark earth/dark green/sky finish, black spinners, and pale grey codes. (2) Fine flying view of a flight of Hawker Nimrods, the navalised version of the Fury, showing K3661:562, K4627 (both Mk IIs), and S1587 (a Mk I), possibly of 801 Sqn, FAA. Note squadron badge on tail and flight commander's aircraft nearest. Fuselage band possibly blue. (3) Swordfish K5955:805 of 823 Sqn in standard pre-war finish. Pictures from T. Bowen and A. Brannan.



4

Key: (4) Swordfish floatplane K5930:073 at Malta in 1938. Note the warning stripes on the floats. Finish of aircraft was silver overall. Photo by Philip Potter. (5) Short 'C' Class flying boat Coolangatta (formerly G-AFBK) seen after transfer to Qantas Empire Airways as VH-ABB. Picture by T. Bowen and A. Brannan. Note the legend 'Qantas Empire Airways Brisbane' low on hull side just forward of the wing and the aircraft name beneath the cockpit.



6

Key: From S. Hubble comes this excellent view of a privately owned DH Puss Moth, YI-ABB, at Luxor, Egypt, 1945, silver overall with black letters. (7) Also at Luxor was this weather-beaten Marauder III coded 'L'. Can anyone place the squadron or serial? (8) Pictures of Miles Martins are none too common. John Hickey photographed this one, ??417, when it force-landed on the beach at Youghal, Eire, in July 1946. It is in dark earth/dark green with black/yellow striped target-tug undersides. (9) Attractive alternative finish for the Airfix Walrus would be this Seagull V of the Royal Australian Navy shown being catapulted from either Hobart, Perth, or Sydney in about 1937. Serial A2-7 is on rudder and fuselage sides with the 7 repeated as a code forward. Aircraft is silver overall except for black prop blades and serials. There is a thin white surround to the fuselage roundel (not visible in this reproduction) and the wheel hubs are grey. Another Seagull on the same ship was A2-2 with identical finish except that there was no large numeral on the nose. Serial under wings read 'A(float)2' '-(float)7' reading from front. Picture by J. Saker.



8



3



5



7

AIRFIX magazine

HYLTON LACY ANNOUNCES MEN AND MACHINES



A new series of books devoted to the fighting men and their machines; books which embrace the aircraft, armoured fighting vehicles and all the amazing variety of armaments used by the nations which were embroiled in the two great World Wars of 1914-18 and 1939-45.

The series was launched with the books on Aircraft: fighters and bombers of the World's Air Forces, and each book contains sixteen pages of full colour, diagrammatic drawings of each major aircraft type.

Many rare and unusual photographs have been discovered and these enhance the descriptive text, written by well-known and authoritative writers.

Men and Machines are available from your nearest retail book or model shop, or direct from the publishers (Hylton Lacy Publishers Ltd., P.O. Box 26, Great Bookham, Leatherhead, Surrey) at a cost of thirty shillings each, plus post and packing.

PROFILE PUBLICATIONS

This well-known and comprehensive series of books are still available from your local stockist and prices are unchanged until further notice. The full range, 204 issues of Aircraft, 96 of Cars and 24 of Armour in Profile, represent the best value in publishing today. They are also available in the hard back de Luxe Bound Volumes, all seven books having a handsome, laminated, full colour jacket.

A.F.V.

This is a new series of Profiles devoted to the Armoured Fighting Vehicles of the world and a total of thirty parts will relate the concise history of these exciting machines. AFV complements the Armour in Profile series, but does not repeat any previous material or issues. AFV will be published at the rate of one volume per month, and further details can be obtained from your local retailer, or from the publishers, Profile Publications Ltd., P.O. Box 26, Great Bookham, Leatherhead, Surrey, England.

March, 1969

BULL'S-EYE !

SCORE ONE — With the new 1/16 LAMBORGHINI MIURA P.400 BERTONE. See illustration.

84/- post and packing included.

SCORE TWO — Be first with the new PERSPEX COVERS for all the models listed. 14½ in. x 7½ in. x 3½ in. high.

36/- post and packing included. See illustration.

TRADE ENQUIRIES INVITED



SCORE THREE — 1/12 scale TAMIYA

Porsche Carrera 910 126/-

Lotus 49 Formula 1 79/6

Honda Formula 1 79/6

SCORE FOUR — With these BANDAI kits

1/12 Ferrari F.1 64/-

1/16 Ford G.T. 79/6

1/20 Lamborghini Marzal 64/6

1/16 Indy Brabham Ford 44/-

SCORE ONE MORE

OTAKI 1/20 Ferrari 275 GTB 44/6

We also stock the famous PROTAR 1/9

Motor Cycle Kits

Honda 6 250 c.c. 67/-

(Prices include postage and packing)

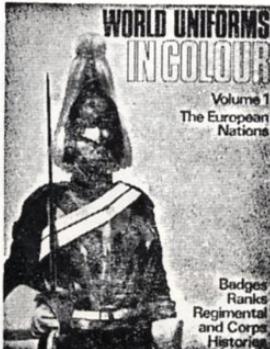
IT ALL ADDS UP TO:

MOTOR RACING SHOPS LTD.

43A SELSDON ROAD, SOUTH CROYDON
CR2 6PY. Tel: 01-657 1676
(MAIL ORDER ONLY)

All kits and covers available from our shops at
Brands Hatch and Mallory Park any race meeting.

A superb book for military enthusiasts, modellers and model soldier collectors — WORLD UNIFORMS IN COLOUR



Vol. 1—The European Nations

The first of a series of full-colour books describing and illustrating the uniforms, badges and ranks of present-day units throughout the world, with regiment and corps histories. The second volume, covering America, Asia, Africa and Oceania, will be published in Autumn 1969.

30s net

(Post and pkg 4/6 extra)

Edited by Rinaldo D. D'Ami, translated by F. Dubrez Fawcett, 12 $\frac{1}{4}$ " x 9 $\frac{1}{2}$ ", more than 200 illustrations in full colour by various artists, four-colour laminated board cover.

Published by

PSL

Patrick Stephens Limited,
9 Ely Place, London, E.C.1
(01-405 2297)

Use this order coupon to obtain a copy of this magnificent book—post it to the publishers or hand it to your bookseller or model shop now. If you prefer not to cut your magazine—write your order out on a piece of plain notepaper.

To: Patrick Stephens Ltd.
9 Ely Place,
London, E.C.1

OR YOUR
BOOKSELLER OR
MODEL SHOP

Please send me one copy of WORLD UNIFORMS IN COLOUR—Volume 1. I enclose my remittance of 30s. (plus 4s. 6d. extra for postage and packing)

NAME.....

ADDRESS.....

Block
caps
please..... (3/69)

Cut coupon along dotted lines

ARGYLE MODELS
CENTRAL STATION BRIDGE
247 ARGYLE STREET
GLASGOW C.2
S.T.D. 041-248-6686

Scotland's Leading Model Shop

TAMIYA

1/12 scale Motorized car kits	39/11
Honda Formula 1	75/-
Porsche Carrera 910	126/-
Lotus 49	75/-
1/21 scale Motorized Tanks	75/-
M4 Sherman Tank	75/-
PzKw3 German Tank	75/-
75mm Assault Gun	75/-
1/25 scale Motorized Tanks	99/11
German Panther	99/11
Jagd Panther (Rommel)	99/11
Chieftain	99/11
1/35 scale Motorized Tanks	31/6
T55 Russian	31/6
M41 Walker Bulldog	25/11
Chieftain	45/-
Rommel	31/6
M48 Patton	45/-
Saladin	18/11
M4 Sherman	31/6
M36 Destroyer	31/6
King Tiger	45/-
Hunting Tiger	45/-

REMOTE CONTROL TANKS

1/21 Big Shot	107/-
1/21 M4 Sherman	107/-
1/21 PzKw3 German	107/-
1/25 German Panzer	128/-
1/25 Jagd Panther (Rommel)	128/-

REVELL

U.S.S. Patrick Henry Submarine with full interior detail	46/-
Howitzer	54/3
S.S. Benledi	13/6
Pedro Nunes	£7 12 6
Alabama	£8 17 6
Constitution	£10 19 6
Apollo Spacecraft	14/11
Apollo with Launching Base	82/6
Astronaut	14/11
Astronaut (6")	7/3

RICO

Motorized Car Kits	
1/12 Lotus 33	59/11
1/12 Mustang	132/-
1/12 Ferrari Flat 12	59/11
1/16 Ford GT40	75/-
1/16 Lola Ford	39/11

We stock the full range of Airfix, Almarks, Aurora, Billings, Bellona Battlefields, De Frey, Historex, Frog, Humbrol, Imai, Minitanks, Monogram, Pyro, Revell, Riko, Roskopf, Steingraeber, Tamiya, Renwall, U.P.C., etc. Also Airfix, Minic, Revell, Riko and Scalextric slot-racing equipment, and every leading make of model railway.

24-HOUR MAIL ORDER SERVICE
orders over £5 post free, otherwise please add 3/- p. and p.

ALMARKS...

THE EXPERTS CHOICE

All Almark transfers have a specially developed top coating. This coating not only gives greater strength but also makes the transfer conform like paint, thus it reveals the very fine detail of the model.

- * SPECIAL TOP COATING
- * EXTRA STRONG ADHESION.
- * CONFORMS LIKE PAINT.
- * AUTHENTIC COLOURS — MATT FINISH.
- * SIMPLY TO APPLY.

ALMARKS PROVIDE THE ULTIMATE FINISH

1/76 FOR AIRFIX A F V TRANSFERS ETC.

T.1. AFRIKA KORPS PALMS	39/11
T.2. S.S. PANZER DIVISION SIGNS	79/11
T.3. GERMAN MILITARY CROSSES, VARIOUS	55/-
T.4. ALAMEIN SHEET	49/11
T.5. GERMAN TANK NUMBERS	35/-
T.6. ARMoured DIVISION SIGNS, BRITISH	35/-
T.7. U.S. ARMY & ALLIED STARS	35/-
T.8. U.S. NATIONAL MARKINGS & NUMBERS	35/-
T.9. GERMAN PANZER DIVISION MARKINGS & VEHICLE CLASSIFICATION MARKINGS	35/-
T.10. GERMAN PANZER DIVISION MARKINGS & WARNING NOTICES	35/-
T.11. GERMAN S.S. PANZER DIVISION EMBLEMS	35/-

Now on sale at leading Hobby Shops and leading hobby mail order firms.



Almarks

ALMARK PUBLISHING CO.

104/106 Watling Avenue, Edgware, Middlesex, England

3/- PER SHEET

TRADERS U.K. AND OVERSEAS
You should stock these fast selling transfers. Trade terms available, write for details.

3/- PER SHEET

THIS MONTH'S NEW ISSUES

BRITISH A.7. TYPE 'C' ROUNDELS RAF
Where Commands directed that the underwing roundels be carried, e.g. Fleet Air Arm fighters, day fighters of Fighter Command, etc, the Type 'C' roundel was specified for use from mid-1942 until mid-1947 but excluding machines of both services operating in the Far East. From early 1945 also used increasingly as an upper-surface roundel generally but again excluding machines operating in the Far East and also any operating at night. Eventually replaced during 1947 by the present day style of insignia.

flag finishes gave way to bare metal finishes late in W.W.II on some machines, so in some instances this roundel was repainted earlier than 1947 on fuselage sides by the 'C' roundel (Almark No. A.7).

GERMAN

A.12. LUFTWAFFE FIGHTER CODE NUMBERS, solid and outlines, black and yellow. This sheet provides the code numbers in solid black, solid yellow, black outline, yellow outline. Easily made up are black with yellow or yellow with black outline.

A.13. LUFTWAFFE FIGHTER CODE NUMBERS, solid and outlines, red and white. Similar to A.12 but the colours are red and white.

A.12 and A.13. Used together will provide not only as above, but all the other permutations of the four colours, i.e. most of the variations used by the Luftwaffe in W.W.II.



NEW BOOKS

OBSERVER'S FIGHTING VEHICLES DIRECTORY.
Bart Vanderveen. 336 pp. 5 $\frac{1}{2}$ x 7 $\frac{1}{2}$. 900 illus. Mainly 'soft skins'. May. 27/-.

CAVALRY UNIFORMS (inc. other mounted troops). 192 pp. Fully illus. in colour. Blandford Pocket Series. May. 31/9.

ROMAN IMPERIAL ARMY. Graham Webster. 332 pp. 31 plates, 55 drawings, plans and maps. Newly published classic. 67/6.

SLIM AS MILITARY COMMANDER. Evans. 240 pp. 49 photos. Four 2-col. pull-outs, 13 other maps. February. 67/6.

THE TANKS OF TAMMUZ. Teveth. 304 pp. 16 pp. of illustrations. Israel's Armoured Corps in Six Days' War. 47/-.

GERMAN TANK & ANTI-TANK. 1933-45. 250 pp. Over 250 photos and drawings; complete history German armour. 88/6.

14 INFANTERIE U. STURM REGIMENT W.W.II. Tress. 286 pp. 40 maps. 174 photos. German text. Picture boards. 27/-.

Obtainable, post free, from:

W. E. HERSONT LTD.

228 ARCHWAY ROAD, LONDON, N.6
(Tel. 01-340 3869)



A plastic miniature model motor cars construction set of 10 Veteran and Vintage Cars. Also contains paints for colouring the cars, and fittings, for displaying the models in a museum. Examples of made up models are shown above. Retail 15/6 in the U.K. There is also a standard set at 10/6. All model shops should stock 'Replicars'.

Produced by
HARBUTT'S PLASTICINE LIMITED
BATHAMPTON · BATH · SOMERSET

to have and to hold... your AIRFIX magazines

The Classified Advertisement columns of this issue of AIRFIX MAGAZINE prove that copies of every issue become more and more valuable as time goes on. The circulation and readership increases steadily each month so that supply very often cannot keep up with the demand and you may well miss a copy. Make sure this doesn't happen to you by ordering a regular copy from your newsagent, or alternatively take out an annual subscription using the form below:

To: AIRFIX MAGAZINE - Subscription Dept.
Surridge Dawson & Co. (Productions) Ltd.,
136/142 New Kent Road, London, S.E.1.

Please send my AIRFIX MAGAZINE each month by post on publication for a 12 month period commencing with the issue. I enclose my cheque/postal order for 36s. (Postage Inclusive.) (USA \$5.50)

Date..... Signed.....

NAME.....

ADDRESS.....

Please write clearly in block capitals.

Once you take AIRFIX MAGAZINE regularly, treat your copies like gold dust by preserving them in AIRFIX MAGAZINE EASIBINDERS. Order these now for your valuable back numbers, your last year's copies or even your next year's copies, using the form below.

To: AIRFIX MAGAZINE - Easibinder Dept.
PSL Publications Ltd., 9 Ely Place, London, E.C.1.

Please send me special AIRFIX MAGAZINE Easibinder/s immediately at 20s. each including postage and packing. I enclose my cheque/postal order for £..... Signed.....

NAME.....
ADDRESS.....

Please write clearly in block capitals.

Attention all owners of
Airfix Handley Page 0/400 kits!

aircraft ILLUSTRATED

3/- monthly

The March issue of AIRCRAFT ILLUSTRATED contains a special feature on the 0/100 and 0/400, including many rare photographs of the wartime bomber and post-war transport versions.

Other exciting items include 1/72nd scale drawings and livery details of Germany's swept-forward wing Hansa Jet; and a photo spread on the Boeing 737.

IAN ALLAN SHEPPERTON, MIDDLESEX.

AIRFIX MRRC

NEW FROM AIRFIX/MRRC

NO BLOW - NO THROW INSTRUMENT TRUED COMMUTATOR

5/64th - (2 mm) diameter shaft suitable can motors.
Cat. No. 840, Price 3/3d. plus 9d. tax.

CRANKED FRONT AXLE KIT

90 ton High Tensile Steel Axle.
2-Pin Wheels. 2- $\frac{1}{16}$ in. wide tyres.
2-Brass Bosses. 2-Washers.
1/32nd scale, .700 dia. Cat. No. 831.
1/24th scale, .800 dia. Cat. No. 832.
Both priced 5/8d. plus 1/4d. tax.

Please send 6d. for catalogue and name of nearest stockist to:
29 Ashley Road, Boscombe, Bournemouth, Hampshire.

NAME.....
ADDRESS.....

Please write clearly in block capitals.



RATES: 7d per word. Minimum charge 7s

BOX NUMBERS: 2s 2d extra charge

All advertisements must be prepaid

FOR SALE

Wargames from America by Avalon Hill Co & Gamescience Corp. Afrika Korps; Battle of Britain; Battle of the Bulge; Blitzkrieg; Confrontation; D-Day; Guadalcanal; Jutland; 1914; Stalingrad; Tactics 2; Strategy & Tactics Magazine. Brochures 6d. McLellan, 12 South Road, Wick, Caithness, Scotland. [343S]

Airfix Books, magazines, photographs - including latest armour/military books. Catalogue 8d (10c). Bookshop, 116 Bohemia Road, St Leonards, Sussex. [344S]

Photo Rail. A fully illustrated catalogue giving details of over 500 photographs taken on British Rail, over the last 20 years, includes last steam service August 11, 1968. Usual price 6/-, to readers of AIRFIX magazine 3/-. Write Bryan H. Jackson, Maple Cottage, Ashburnham Avenue, Harrow-on-the-Hill, Middlesex. [347S]

Model Tramway Rail, Army and Road Transport transfers. Send stamp for new 1969 list and free sample. Mabex Products, 31 Pevensey Road, Eastbourne, Sussex. [348S]

Mint Frog Venom 4, Thunderjet, Westland S55, Sealand unmade. B. Moseley, 252 Hillmorton Road, Rugby, Warks. [351S]

Military and Civil Aircraft photographs. Lists 6d. T. A. Brown, 45 Clifton Road, Southall, Middx. [349S]

Superb collection of aircraft, car magazines and books for sale. Apply: S. Mitchell, 6 Buckland Close, Westwood, Peterborough. [352S]

Airfix Magazines, Feb 64-Feb 68, 6 missing. Meccano Mags, Feb 61-April 66, 4 missing. Offers Dixon, 2 Wolveleigh Terrace, Gosforth, Newcastle-on-Tyne. [353S]

Airfix Magazines, June 1966-Oct 1968, offers over 75s with SAE, Hudson, 21 Burnroyd Avenue, Crosshills, Keighley, Yorks. [354S]

POP IN AND SEE THE MOST COMPREHENSIVE MODEL SHOP IN LONDON

We stock all Modellers requirements including Boats, Trains, Cars, Radio Control equipment and Fibre Glass Boat Hulls.

We have an enormous range of static Model Kits and comprehensive stocks of Airfix, Revell, Champion and Scalextric Sets and Accessories

Do you want a car, Tank or Motor Cycle? Why not pay us a visit?

H.P. You need NO DEPOSIT on orders of £25 or over. STOP PRESS... NEW MONOGRAM B.52... £11.19.6.

LEWISHAM MODEL CENTRE,
45 LEE HIGH ROAD, LEWISHAM, SE13
Tel. 01 852 2637

LATE NIGHT FRIDAY: open until 8.30 p.m.

Classified Adverts

Please address your correspondence to:
AIRFIX MAGAZINE Classified Advertisement Department
9 Ely Place, London, EC1
Closing date for next issue — March 1

Negatives of all marks E.E. Lightning. State serial and price, also Balliols and Meteors. T. A. Brown, 45 Clifton Road, Southall, Middx. [356W]

Airfix Magazine April 1968 and 'Aircraft Illustrated' March 1968, Mint 10/- each. Tysoe, 5 St Andrews Close, Droitwich, Worcs. [361W]

Minitanks Wanted. Pzkw III and IV, any type, Panthers and Tiger II/182. Also US Sherman Medium Tanks (NOT General Shermans). Please state price. Box No 362W.

Airfix Catalogues, 1st and 2nd editions in good order. D. Egremont, The Cottage, Redlynch, Nr Salisbury, Wilts. [363W]

Full Set Players cigarette cards 'Uniforms of the British Empire', c 1941. State price. Capt N. J. Dobbins, The High School, Newcastle, Staffs, ST5 1OB. [364W]

War Game figures, etc. Lists and prices to: R. Beaumont, 25 Kitchens Road, Berkhamsted, Herts. [368W]

MISCELLANEOUS

Book-Search for English, American, German out-of-print books. 116 Bohemia Road, St Leonards, Sussex. [346M]

Aero & Space Vehicle Club. Their annual exhibition of models to be held at the Community Centre, Womborn, Nr Wolverhampton on April 20. [366M]

PERSONAL

Have you a model railway? If so, you must read Railway Modeller monthly 3s. Each issue packed with Show-you-how articles and descriptions of other people's layouts to help and encourage you to get the most from your own line. From Model Shops and Newsagents everywhere. Send 6d for specimen copy to Peco Publications, Seaton, Devon. [341P]

I have recently moved to Britain from the US. I desperately need the company of any interested in war-gaming. If necessary I will come to you. Please contact Mike Embree, 4 Fairford House, Windmill Road, Brentford, Middx. [365P]

HINTON HUNT FIGURES

Member of the Guild of Model Soldier Manufacturers
20 mm WAR GAME RANGE
large range of high quality metal 20 mm War Game figures.
BULK PRICES for orders of 100 and over.

"Painting Instructions" available giving full details of the colouring of the uniform.

54 mm COLLECTOR RANGE
obtainable hand painted or unpainted. Skilled craftsmen
animate each figure by hand.

MODEL SOLDIER SHOP, HINTON HUNT FIGURES, 9 and 10 the CAMDEN PASSAGE BOUTIQUE, Antique Market, Islington, London — 5 minutes from Angel Tube Station

NEW CATALOGUE
Send 2/6d. for catalogue of 20 mm figures or 54 mm figures.
Price for both catalogues 4/6d. only.

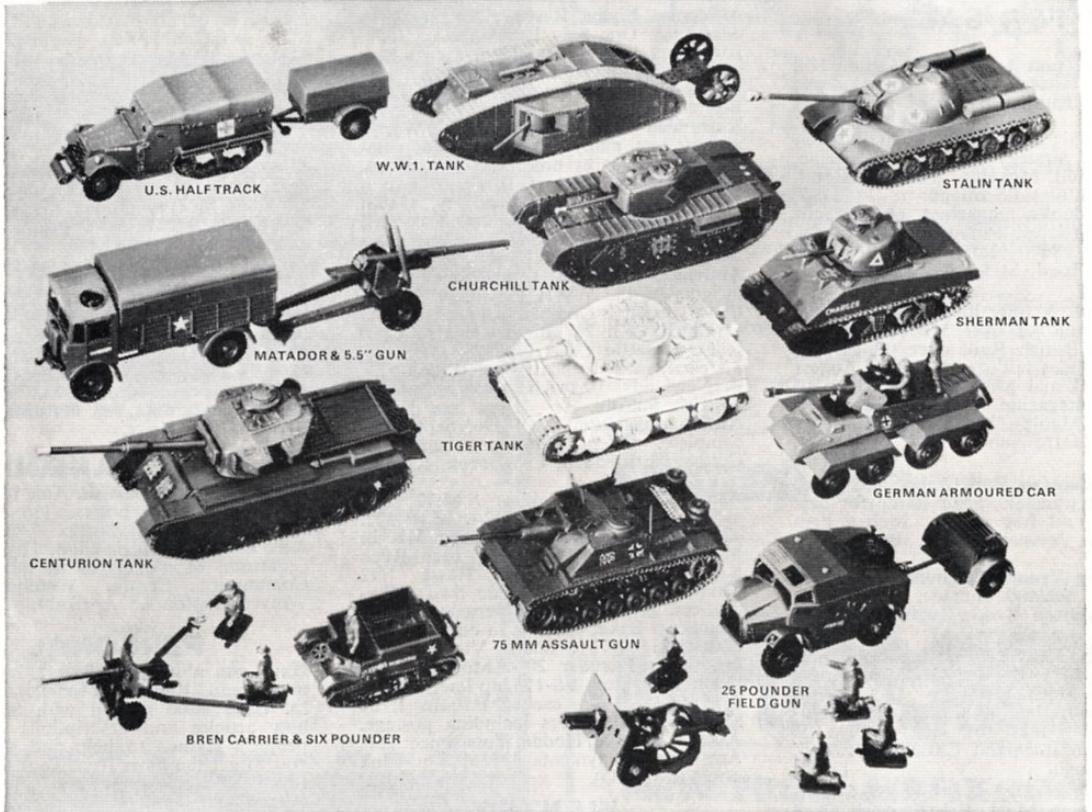
HINTON HUNT FIGURES
Rowsley, River Road, Taplow, Maidenhead, Berks., England



The finest armoured fighting force!

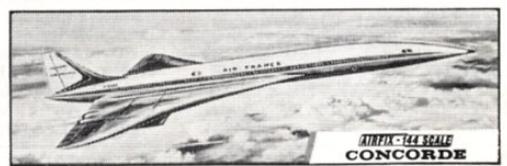
AIRFIX BRINGS IT TO LIFE! With British, American and Russian built tanks, missiles, and armoured vehicles, this is surely the most formidable force ever—and all from Airfix!

The vast range of Airfix construction kits covers 19 different series, including planes, ships, cars, historical figures and trackside series—each model just like the real thing! Prices from only 2/9d. to 21/6d.



**AIRCRAFT,
SHIPS, CARS,
ROLLING
STOCK TOO!**

Start your
collection NOW!



OVER 250 KITS TO CHOOSE FROM!



JUST LIKE THE REAL THING!

From toy shops, model and hobby shops and F. W. Woolworth

STOP PRESS

AIRFIX

QUEEN ELIZABETH 2

This kit of the world's most modern luxury liner contains nearly 150 pieces which make up into a 19½ inch long highly detailed model. Price 13/9.

AIRFIX MAGAZINE 2/6 MONTHLY
ASK FOR THE AIRFIX KIT CATALOGUE

AIRFIX magazine

auto-models

THE FULL RANGE OF
HELLER

NEW

35/11 each

1500 1/24 Renault R8
1500 Gordini Monte Carlo Rally Car. Great twin cam. engine detail

AIRCRAFT

1/72 Fighters

091 Bloch 152 8/11
092 Dewoitine 520 8/11
093 Morane Saulnier MS 406 8/11
094 Caudron H-75 A3 8/11
095 Les Mureaux II/7. R2 8/11
096 Caudron C-714 8/11

1/72 Bombers

390 Amiot 143 22/-
391 Lioré et Olivier 45 22/-
392 Breguet 693 22/-
393 Bloch 174 22/-
394 Potez 63-II 22/-
397 Leo 451 22/-
545 Bloch 210 35/11

1/50 Fighter Jets

105 Trident 17/11
120 Fiat G.91. R3 17/11
511 Mirage IIIR 27/6

1/50 Bombers

305 Vautour IIIB 22/-
330 Vautour IIIN 22/-
500 Etendard IV 27/6

1/50 Fighter Bombers

505 Breguet Alizé 27/6
820 Breguet Alizé 44/6
510 Mirage IIIC 27/6

1/40 Fighter Jets

310 Fouga Magister 22/-

1/50 Helicopter

200 Alouette III 22/-
325 Frelon 21/11

335 S.A. 330 21/11

1/125 Civil Aircraft

700 Boeing 707 35/11
705 Douglas DC8 35/11

1/100 Civil Aircraft

300 Caravelle 22/-
855 Concorde 44/6

715 Breguet Atlantic 35/11

320 I/75 Super-Brouard 22/-

720 I/50 Mystere 20 35/11

710 I/85 Noratlas 35/11

Historic Aircraft

335 I/75 Arc-en-Ciel 22/-
1000 I/50 Spad VII 22/-

Sprint Series with working

interior and exterior lighting

525 I/48 Alouette III 27/6
835 I/50 Breguet Alizé 44/6
840 I/100 Caravelle 44/6
850 I/125 Boeing 707 44/6

SHIPS

1/200 Civil Liner 88/11

1010 Avenir 35/11

745 Le Volantaire 35/11

1/430 Aircraft Carriers

1000 Clemenceau 88/11

1005 Foch 88/11

1/400 Destroyers

540 Surcouf 27/6
541 Maillé-Breze 27/6
542 Kersaint 27/6
543 Dupetit-Thouars 27/6

1/400 Ships

860 Colbert Cruiser 44/6
870 Jeanne D'Arc 44/6
Helicopter Carrier 44/6

Historic Ships

865 I/90 Santa Maria 44/6
905 Phenix 88/11
600 I/200 Epervier 35/11
910 Royal Louis 88/11
915 La Sirene 88/11

CARS

730 I/20 Renault R16 fully
detailed engine 35/11
735 I/24 Alpine A210 G.T.
Fully detailed
everything 35/11

740 I/24 Matra 511.
Engine suspension,
detail 35/11

Also full range of cadet, series
aircraft and galleons, at 5/-
Send 2/- for illus. Heller
catalogue.

all metal auto-kits 1/24 scale

MODERN SERIES

001 1962 BRM F.1 61/-
002 1963 Lotus 25 F.1 54/-
003 1961 Ferrari F.1 61/-
004 1963 BRM F.1 61/-
007 Lotus Super 7 67/6
011 1965 Lotus 38 Indy. 67/6
012 1965 Lotus 33 F.1 61/-

VINTAGE SERIES

005 1927 Bugatti 35B 74/-
006 1941.5 E.R.A. 74/-
008 1932 Alfa P.3 G.P. 74/-
010 1929 M.G. 'M' Type 67/6
013 1929 Mercedes SSKL 84/-
014 1925 Austin 7 Tourer 74/-
016 Austin 7 Open Tourer 74/-
017 1933 M.G. K3 Magnette 74/-

M.P.C. Kits

FULL CATALOGUE
With complete lists of all
ranges stocked, 3/6 with
illustrations.

1/43 RIO
Vintage & Veteran Miniature
Masterpieces
1 Italia 1906 38/11
2 Italia 1907 43/11
3 Fiat 501S 1919 38/11
4 Fiat Torpedo 1919 38/11
5 Alfa 1932 P3 38/11
6 Fiat Mod. O 1912 38/11
7 Fiat Spyder 38/11
8 Isotta Fraschini tipo 8a 1924 46/11
9 Isotta 1924 (open) 46/11
10 Bianchi Laudauer 1909 46/11
11 Bianchi 1909 (open) 46/11
12 Fiat 1912 Spyder 38/11
13 Fiat 'Ballista' 1932 38/11
14 Fiat Tipo 2 1910 46/11
15 Isotta Spyder 1924 46/11
16 Chalmers Detroit 1909 USA 46/11
17 Mercedes 1909 46/11
18 Bianchi 1906 46/11
19 Alfa 1750 1932 46/11
23 Fiat 60 cv 1905 43/11
24 Fiat 1905 (open) 43/11
25 Fiat Phaeton 1906 43/11
26 Fiat 12 h.p. 1905 38/11
27 Fiat 24 h.p. 1905 46/11
28 Bianchi 1905 46/11
29 1901 Merc Simplex 46/11
31 1901 Fiat B 8v 32/11
32 1903 Fiat 16 cv 38/11
33 1908 Mercedes Limousine 70 cv 43/11
34 1907 Renault tipo X 43/11

1/25 Scale

368 '68 Chev. Impala 34/6
468 '68 Impala Conv. 34/6
568 '68 Corvette Hdrt. 34/6
668 '68 Corvette Conv. 34/6
968 '68 Pontiac Hdrt. 34/6
1068 '68 Bonneville Conv. 34/6
1468 '68 Olds Toronado 34/6
1868 '68 Camaro Hdrt. 34/6

1/25 Scale Vintage Cars

201 1932 Chrysler Conv. 34/6
204 1932 Chrysler Rdstr. 34/6
228 1928 Lincoln 34/6
232 1932 Imperial 34/6
302 1932 Chevy Roadster 30/6
303 1933 Chevy. Panel Truck 30/6
304 1928 Ford Truck 30/6
305 1929 Ford Station Wagon 30/6

The last of the '68 kits—

1/25 I. M. C. kits

As detailed as the real thing

103 Cougar II 34/6
104 Ford G.T. 40 34/6
105 Ford '48 Conv. 34/6
106 Lotus Indy 38 25/-

107 Dodge 'Little Red Wagon' 34/6

108 Mecon Lola T.70 (The latest to come from USA with the famous I.M.C. detail i.e. engine, suspension, steering interior and underside.) 34/6

109 Mustang II 34/6

111 P.T. 1961 Lotus 25/-

113 Ford T. '1' Car 34/6

114 Volkswagen 'Beetle' 34/6

115 '48 Ford Coupe ('46 or '47 versions possible) 34/6

116 Chaparral 12, fully detailed Chevy engine and suspension, removable rear deck, opening doors, steering, working aerofoil 34/6

117 Ford G.T. Mk. IV 34/6

1/32 KITS

181 Ford Galaxie 17/11
182 Plymouth Fury 17/11
183 Pontiac G. P. 17/11
184 Chevrolet Impala 17/11

1/43 SOLIDO

Beautifully detailed diecast replicas

'L'Age D'Or' 44/6 ea.
132 1928 Mercedes SSK 136 Bugatti Royale

137 1928 Mercedes (open) 140 1925 Panhard et Levassor

144 1934 Voisin 17 C.V.

145 1926 Hispano-Suiza

149 1926 Renault 40 C.V.

154 1924 Fiat 525 N.

SOLIDO (France)

1/43 Military Vehicles

200 M.20 Combat Car 19/6

201 'Unic' Missile-Launcher 36/11

202 U.S. M.47 Patton Tank 43/11

203 Renault 4/4 19/6

204 105F Anti Aircraft Gun 32/11

205 105C Field Gun 32/11

206 10" Howitzer Cannon 32/11

207 U.S.S.R. PT76 Tank 43/11

208 U.S.S.R. SU100 Tank 43/11

209 French AMX30 Tank 43/11

212/13 Merc. Jeep and Trailer 24/6

214 Berliet Auroch Amphibious Troop Carrier 36/11

1/43 DUGU

More Italian Masterpieces

1 1911 Fiat 4 43/6

4 1907 Fiat F.2 G.P. 43/6

6 1907 Itala Palombera 51/1

7 1912 Itala 25/35 HP 43/6

11 1899 Fiat 3.5 HP 41/1

14 1924 Fiat 509 43/6

16 1909 Itala 35/45 HP 51/1

17 1934 Fiat Balilla 51/1

Coppa d'oro 51/1

19 1931 Duesenberg 51/1

POLITOY

1/43 Italian Models

4 new in 'M' Series

552 Lamborghini Miura 28/6

540 Fiat 2700 G.T. 21/6

538 Volkswagen 1600 TL 21/6

539 Porsche 904 GTS 23/6

539 Lamborghini 350 GT 21/6

536 Ferrari 'Dino' 21/6

534 Lola-Ford GT 18/11

532 Alfa 1750 GS Zagato 28/6

527 Porsche 912 18/11

525 Ferrari 'Le Mans' 28/6

520 Lancia Fulvia 18/11

504 Ferrari 250 GT 18/11

18/11

18/11

18/11

18/11

18/11

18/



YOUR INTERNATIONAL MODEL MAIL ORDER HOUSE

Suppliers to the British and Overseas Governments



AlmarkS 3/-

PER SHEET

A.F.V.'s 1/76

- T.1. Afrika Korps Palms
- T.2. SS Panz. Div. Signs
- T.3. German Crosses for Military Vehicles
- T.4. Alamein Sheet
- T.5. German Tank Numbers
- T.6. British Armoured Unit Signs
- T.7. US Army & Allied Stars
- T.8. US National Markings & Numbers
- T.9. German Panz. Div. markings and vehicle classification markings.
- T.10. German Panz. Div. markings and warning notices
- T.11. SS Panz. Div. Emblems

Aircraft 1/72

- A.1. W.W.II Swastikas
- A.2. RAF 'B' Type Roundels
- A.3. SEAC Roundels for fighters and medium aircraft
- A.4. RAF Squadron Code Letters
- A.6. RAF Squadron Code Letters, dull red $\frac{1}{2}$ "
- A.11. German W.W.II crosses (various)

The latest four Aircraft transfers, please see makers advert for details.

NEW A.F.V. KITS

- 1/35 by TAMIYA with remote control
- German PANTHER
- German ROMMEL
- Russian STALIN T10 59/11 each

NEW CAR KITS

- 1/12 PORSCHE CARRERA 910 by Tamiya £6 6 0
- 1/12 HONDA S800 SPORTS excellent value £4 15 0
- OLD TIME CLASSIC CARS 1/16 DAIMLER MOTOR CARRIAGE 1886, 55/-
- DE DION BOUTON 1901 49/11 both the above have both chrome and brass parts and fully illustrated instructions.

NEW AIRCAM AVIATION SERIES No 4 SUPERMARINE SPITFIRE Mk I-XIV

Merlin engine in RAF, RAAF, SAAF, RCAF, USAAF, Belgian, Polish, Czechoslovakian, Free French, French, R. Norwegian, R. Netherlands, R. Danish, Israeli, Italian, Greek, Turkish, Portuguese, Egyptian, Burmese, etc air forces 21/-

AND FIRST OF SPECIAL SERIES BATTLE OF BRITAIN

Includes Hawker Hurricane, Spitfire, ME. Bf109, Luftwaffe and RAF unit insignia, stencil details, etc. 17 colour pages. A must for this period, a book bound to please and surprise you 21/-

Other Aircam Books available:

No. 1. North American P-51D MUSTANG in USAAF-USAF SERVICE	21/-
No. 2. REPUBLIC P-47 THUNDERBOLT	21/-
No. 3. NORTH AMERICAN MUSTANG Mk I-IV	21/-

NEW ARMOUR PROFILES

These AFV Publications are the successors of the very successful "Armour in Profile", greatly enlarged issues with:

AFV 1. CHURCHILL—BRITISH INFANTRY TANK Mk IV.

AFV 2. PANZERKAMPFWAGEN III.

- ★ 20 pages plus covers
- ★ Lavishly illustrated with photos and
- ★ full colour centre spread of subject AFV in 5 views
- ★ very complete text of both production and fighting history.

more to follow 5/- each

KOOKABURRA TECHNICAL PUBLICATIONS



- SOPWITH SNIPE
- MESSERSCHMITT Me 262 Part I. Part II
- ALBATROS SCOUTS
- MARKINGS OF THE ACES 8th U.S. AIR FORCE
- COMMONWEALTH BOOMERANG
- WESTLAND WHIRLWIND OF W.W.II
- WARPLANES OF THE R.A.A.F.
- WIRRAWAY AND BOOMERANG MARKINGS
- LOCKHEED P-38 LIGHTNING

8/6 each

MEN AND MACHINES

NEW! AMERICAN FIGHTERS OF WORLD WAR II

Contents, Bell P-39 Airacobra, Boeing P-26, Grumman F4F Wildcat, Grumman F6F Hellcat, Lockheed P-38 Lightning, North American P-51 Mustang, Northrop P-61 Black Widow and: 30/-

- RAF BOMBERS OF W.W.II Vol. I
- LUFTWAFFE BOMBERS OF W.W.II
- LUFTWAFFE FIGHTERS OF W.W.II
- RAF BOMBERS OF W.W.II Vol. 2

Overseas traders
write for full trade
terms Dept. A.

30/-
30/-
30/-
30/-

NEW AIRCRAFT KITS

FROG 1/72
Bristol Blenheim Mk I or IF 6/-
Kawaishi H8K2 "Emily" Flying Boat 32/6

ARTIPLAST 1/50 from Italy
Macchi C 202 11/9
Fiat CR 32 17/-
Fiat CR 42 17/-
Fiat G 91 PAN 17/-
Fiat G 55 17/-
Ansaldo 8VA5 17/-
Savoia Marchetti SM 79 34/-

HAWK $\frac{1}{2}$ scale 15/9 each
Westland Lysander
Grumman Bearcat

IMC 1/48th 34/6 each
Bell Jet Ranger
Executive Lear Jet

BACK IN STOCK:
HASEGAWA 5/11 each
F-86F 1/72nd
T-38A Talon 1/72nd
F-5A Freedom Fighter 1/72nd
Type 0 Observation Seaplane "Pete"

NICHIMO 1/72nd 5/11 each
G 6 Carrier Fighter of China Wars 1937-41 Claude
Spitfire VB

TAMIYA 1/72 5/11 each
Raiden (Jack)
Shinden
Hayate Fighter
Zerosen (Hamp)
Shoki (Tojo)

L&S 1/75 5/11 each
Suisei (Judy) Dive Bomber
Zero 21
Oscar Mk I
Oscar Mk II

AOSIMA 1/72 4/11 each
A7M2 Reppu
M6A1 Seiran
Curtiss P-36A
F4F Wildcat
Goshikisen
A6M2 Zero 21

LINDBERG 1/72 5/11
Focke Wulf 190D-9
Heinkel 210 15/9

IMC 1/72 16/6
Battle damaged kits
A-1H Skyraider
RF-4B Phantom
F-105D Thunderchief
Sabre

RIKO 1/50 7/11 each
Hein (Tony)
Spitfire
ME 109E

POST AND PACKING
Books and transfers please add 5%
Kits 2/- for £1 order and 2/- per £1
to £5. Over £5 post free.
Minimum postage 9d.